

Vol. 5.
IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

AUG 18 1982

TUART CUNNINGHAM, CL
ED STATES DISTRICT CO.

THE MAGNAVOX COMPANY, a corporation,
and SANDERS ASSOCIATES, INC., a
corporation,

Plaintiffs,

vs

MATTEL, INC., a corporation,
SEARS, ROEBUCK & COMPANY,
a corporation,

Defendants.

800 4124

DOCKETED

AUG 19 1982

Before The HONORABLE GEORGE N. LEIGHTON,
Judge

Tuesday, July 6, 1982

10:00 a.m.

The trial was resumed pursuant to adjournment.

Present:

MR. THEODORE ANDERSON
MR. JAMES T. WILLIAMS

MR. GRANGER COOK, JR.,
MR. EDWARD D. MANZO

Clark's File Copy

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1 THE CLERK: 80 C 4124, Magnavox v. Mattel, case on
2 trial.

3 MR. COOK: Good morning, your Honor.

4 THE COURT: Good morning, Mr. Cook.

5 MR. ANDERSON: Good morning, your Honor.

6 Your Honor, at the close of the session, the
7 last session, we offered our exhibits and Mr. Cook reserved
8 the opportunity to review them and object and I think that
9 is where we stand.

10 THE COURT: All right. What are the objections to
11 the exhibits offered in evidence, Mr. Cook?

12 MR. COOK: Your Honor, maybe I can proceed in an
13 orderly fashion with the numbers which are recited in
14 the plaintiffs' exhibit list.

15 THE COURT: All right.

16 MR. COOK: With respect to page 3, Mattel objects
17 to Exhibits PX-25.

18 THE COURT: Let's stop right there. What is the
19 ground of the objection? One at a time.

20 MR. COOK: I am trying to group them all together,
21 your Honor, if I may.

22 THE COURT: Can you do that?

23 MR. COOK: I discussed this matter with opposing
24 counsel and I think I can give them to you in groups.

25 THE COURT: All right.

1 MR. COOK: Perhaps it might facilitate the disposition.

2 The first group is PX-25 through 60.

3 THE COURT: Inclusive?

4 MR. COOK: With respect to those that they have
5 offered, your Honor. There are a few, I think, in the
6 middle of that that have been offered. To be more precise,
7 I can identify them for the record.

8 THE COURT: Well, I have the index.

9 MR. COOK: 25 through 42, 44 through 51 and 55
10 through 60. Our specific objection is based on irrelevance
11 and immateriality. These exhibits I have just identified
12 relate to the Magnavox Odyssey commercial product.
13 Exhibit 7, is the Magnavox Odyssey Model 1-TH200 game which
14 was first marketed. It was the first videogame or television
15 game ever sold for home use and it was demonstrated in
16 1967 and it clearly goes to the issues which Mr.
17 Cook is raising, namely, the scope of the claims and what
18 they encompass, the range of the claims. In part, to some extent
19 it is the nature of the product, what the industry was selling
20 at that time.

21 The Court is trying to defend someone's right to
22 control the industry and yet the game industry is relevant. I
23 think there is no basis for all that is objection. The
24 exhibits are relevant to the issues which Mr. Cook is raising.

25 THE COURT: All right, the exhibit is relevant.

1 Your Honor, we submit that the issues in this case
2 are whether or not the Mattel accused videogame infringed
3 the asserted claims of the patent.

4 The Court knows we are not contesting validity.
5 If the validity was in issue, it might be very appropriate
6 to have these kinds of exhibits in a case but we submit,
7 respectfully, they should not be in and we object on those
8 grounds.

9 MR. ANDERSON: Your Honor, we have essentially already
10 discussed this at length. The objection was made at the time
11 the testimony was given.

12 The first one, for example, that you asked about,
13 Exhibit 25, is the Magnavox Odyssey Model 1-TL200 game which
14 Mr. Baer described. It was the first videogame or television
15 game ever sold for home use and it was demonstrated in
16 Court and I submit it clearly goes to the issues which Mr.
17 Cook is raising, namely, the scope of the claims and what
18 determines the scope of the claims. In part, to some extent
19 it is the success of the product, what the industry was before
20 and afterward.

21 Mr. Cook is trying to contend somehow that the
22 computer industry and not the game industry is relevant and
23 I think there is no basis at all for this objection. It
24 extends to all of the exhibits which he has grouped.

25 THE COURT: All right. The objection is overruled.

1 They are admitted in evidence.

2 (Said exhibits, so offered, were
3 admitted in evidence as PX 25 through 42, 44
4 through 51 and 55 through 60.)

5 MR. COOK: Your Honor, the second set of objections
6 relate to Plaintiffs' Exhibits 78, 79, 80 and 81 appearing
7 on Page 6.

8 MR. ANDERSON: I don't think we offered those in evidence,
9 Mr. Cook. We discussed those briefly this morning. But if
10 your notes --

11 MR. COOK: According to my notations you did.

12 THE COURT: Mr. Anderson, what does the record show?

13 MR. ANDERSON: The record shows we did not offer these
14 four in evidence.

15 THE COURT: Then they are not in evidence, Mr. Cook.
16 There is no need objecting to exhibits that are not in
17 evidence.

18 MR. COOK: I withdraw my objection, your Honor.

19 THE COURT: All right.

20 MR. COOK: I made a notation to the effect that they were
21 offered.

22 THE COURT: All right. Proceed, then.

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1 MR. COOK: The next objections deal with Plaintiffs'
2 Exhibits 83 through 102. These exhibits relate to various
3 devices presumably that have been manufactured and sold
4 by licensees or earlier parties with whom Magnavox has
5 apparently had some discussion.

6 Once again, your Honor, our objection is on the
7 grounds of relevancy and materiality. Whether there is
8 a schematic diagram of Atari's Pong --

9 THE COURT: Well, let me hear from Mr. Anderson.

10 MR. ANDERSON: Your Honor, again, these are all
11 offered in evidence and admitted in the prior case. We
12 have a stipulation that anything that was used there can
13 be used here.

14 Again, that goes directly --

15 THE COURT: Wait a minute. Where is that stipulation?

16 MR. ANDERSON: Your Honor, it is an order that your
17 Honor entered, and I have a copy of it right here. It
18 is the order that the Court entered, the order, the Court
19 entered the order on December 18, 1981. I hand up to --

20 THE COURT: All right.

21 MR. ANDERSON: -- a copy of the order and the minute
22 order. It is paragraph 1 of a draft order. And it is
23 covered by the minute order.

24 THE COURT: All right.

25 MR. ANDERSON: And the relevance and materiality again

1 go to the TV, the television game industry. This traces
2 it very clearly, the facts are, I don't think, in dispute.

3 Mr. Cook is again presenting contentions that
4 somehow the computer industry is what determines the
5 scope of the claims. We submit the television game
6 industry that was created in large part by this patent,
7 it is the determinative factor, and all of these, again,
8 can be grouped. They are games that grew directly out
9 of the patent in suit, as Judge Grady has already found.

10 And we believe they are very relevant, clearly relevant.

11 Our position is that the issues are clear, and
12 whether or not other people are involved in manufacturing
13 comparable products or uncomparable products, just doesn't
14 have any bearing on the issues in this case.

15 MR. BROWN: Again, your honor, these --

16 MR. COOK: Excuse me, one further thing.

17 MR. BROWN: I'm sorry.

18 MR. COOK: There is an order that the Court did enter.

19 and reference has been made to it just a moment ago.

20 This order was generated, as I recall, primarily to avoid

21 duplication of discovery. However, was concerned about the

22 fact that a new case or defendant it had sued might raise

23 issues that would over the old trials and the old cases, and

24 so they tried to expedite discovery. And I think that the

25 was the intent in that.

nt
1 MR. COOK: Your Honor, short rebuttal?

2 If in fact in this case, your Honor, we were
3 contesting validity, as was the case in the earlier Magnavox
4 case, then perhaps there would be some basis for these
5 exhibits to be in the case. But, your Honor, we are not
6 doing that and we are trying to limit the issues to the
7 questions of infringement and enforceability. And I don't
8 think that there is any rational basis for having all of
9 this collateral information which deals with non-party activity
10 in the case.

11 Our position is that the issues are clear, and
12 whether or not other people are involved in manufacturing
13 comparable products or uncomparable products, just doesn't
14 have any bearing on the issues in this case.

15 MR. ANDERSON: Again, your Honor, these --

16 MR. COOK: Excuse me, one further thing.

17 MR. ANDERSON: I'm sorry.

18 MR. COOK: There is an order that the Court did enter,
19 and reference has been made to it just a moment ago.
20 That order was generated, as I recall, primarily to avoid
21 duplication of discovery. Magnavox was concerned about the
22 fact that a series of defendants it had sued might take
23 Magnavox back over the old trails and the old case, and
24 so they tried to expedite discovery. And I think that there
25 was some error in that.

1 However, an attempt to obtain an order to
2 expedite discovery is a far different cry than getting an
3 order which automatically renders any earlier exhibits
4 admissible in this case.

5 So I don't think that the order is conclusive
6 at all your Honor.

7 MR. ANDERSON: Your Honor, on that point Mattel
8 primarily argued use of trial in their memorandum on that
9 order. And that was a very definite issue that was briefed
10 and was part of the Court's order.

11 Again, these exhibits, or most of them, are
12 exhibits about which there was testimony. I think --

13 THE COURT: Before Judge Grady.

14 MR. ANDERSON: No, before your Honor.

15 THE COURT: Here, too?

16 MR. ANDERSON: Yes.

17 THE COURT: All right. By whom, Dr. Ribbens? Who
18 testified?

19 MR. ANDERSON: Mr. Baer testified about Exhibits 84
20 through 91, and others. And they, again, they can be
21 grouped as Mr. Cook has suggested.

22 MR. COOK: Your Honor, the problem is we did not attend
23 the deposition --

24 THE COURT: Mr. Cook, no, I have heard enough. The
25 objection is overruled. These are admissible. The grounds

1 for admission have been stated and the relevancy has been
 2 supported. The objection is overruled, they are admitted
 3 in evidence. (Plaintiffs' Exhibits 83 through
 4 102 inclusive were received in
 5 evidence.)

7 I believe, however, that with respect to
 8 Exhibits 103 and 104 and 105, there may be a
 9 reference in these General Instrument catalogs to some of
 10 the components that are embodied in various accused
 11 products.

12 With that exception, we want to object to these
 13 on the grounds that they don't relate to any products in
 14 issue and they certainly are not embodied in the accused
 15 products.

16 THE COURT: Mr. Anderson?

17 MR. ANDERSON: Exhibits 103, 104 and 105, 106, as
 18 Mr. Cook has suggested, relate to chips, integrated
 19 circuit chips made by General Instrument Corporation,
 20 some of which were used and some of which they do not.
 21 They are catalogs that include reference to
 22 General Instrument's early efforts to make and market
 23 integrated chips that were not very successful
 24 that are in the history, that Mr. Cook bought and sold.
 25 And they also show how expensive that line,

1 MR. COOK: Your Honor, the next group is Plaintiffs'
2 Exhibits 103, 104, 105, 106 and 169. These are General
3 Instrument catalogs of various electronic components.
4 In several instances, I believe specifically in Plaintiffs'
5 Exhibit 105 and 106, there is no reference to any components
6 that are used in the accused products.

7 I believe, however, that with respect to
8 Plaintiff's Exhibits 103 and 104 and 169, there may be a
9 reference in these General Instrument catalogs to some of
10 the components that are embodied in Mattel's accused
11 products.

12 With that exception, we want to object to these
13 on the grounds that they don't relate to any products in
14 issue and they certainly are not embodied in the accused
15 products.

16 THE COURT: Mr. Anderson?

17 MR. ANDERSON: Exhibits 103, 104 and 105, 106, as
18 Mr. Cook has suggested, relate to chips, integrated
19 circuit chips made by General Instrument Corporation,
20 some of which Mattel uses and some of which they do not.

21 They are catalogs that include reference to
22 General Instruments' early efforts to make and success
23 in making integrated chips that were not microprocessors
24 that the industry bought, that Magnavox bought and used.
25 And then later exhibits show how expanding that line,

1 General Instruments came out with a chip that Mattel has
2 used in their games, and again there was testimony about
3 General Instruments and there will be a lot more testimony
4 about General Instruments and their involvement in both
5 the Mattel games and the Odyssey games. And I think they
6 are clearly relevant.

7 THE COURT: Objections overruled. They are admitted
8 in evidence.

9 (Plaintiffs' Exhibits 103, 104, 105,
10 106 and 169 were received in
11 evidence.)
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1 MR. COOK: Your Honor, the next group is on Page 8,
2 Plaintiffs' Exhibits 112, 113, 114 and 115. These, apparently,
3 are four flyers, advertising materials, relating to four
4 other parties. Perhaps some of these were earlier associated
5 with this consolidated case, but in any event, as I previously
6 indicated, these exhibits relate to items that are not in
7 issue, and they have no bearing on the issue in this case.

8 MR. ANDERSON: Your Honor, this really falls in the
9 same categories of Exhibits 83 through 102 about which Mr. Cook
10 has just argued. They go directly to the development of the
11 game industry. They differ only in one respect, and that is
12 with respect to Exhibits 83 to 102, they were also covered
13 in the trial before Judge Grady and referred to. And they
14 were covered in the stipulation and order.

15 With respect to Exhibits 112, 113, 114, and 115,
16 they differ in that they came after the trial in 1977.
17 And Mr. Baer specifically testified about his involvement
18 in the Coleco game referred to in Exhibit 112.

19 There was also testimony about the Fairchild
20 game which is referred to in Exhibit 113. There was also
21 testimony about the Atari game and the Bally game of 114 and
22 115.

23 And again, these objections were voiced at
24 the time most of this testimony was being taken. They go
25 very specifically to the transition in the industry from

1 integrated chips and isolated ROMs to the use of a micro-
2 processor in games prior to the Mattel game. And I believe
3 they are clearly relevant under Rule 401.

4 THE COURT: Objection is overruled. They are admitted
5 in evidence.

6 MR. ANDERSON: Thank you, your Honor.

7 (Plaintiffs' Exhibits 112, 113, 114
8 and 115 were received in evidence.)

9 MR. COOK: Your Honor, the next category appears on
10 Page 11 on Plaintiffs' Exhibit 159 and 160. These are
11 excerpts from the transcripts of testimony taken at the prior
12 trial of Mr. Fritchie and Bushnell.

13 Quite clearly, Mattel had no opportunity to
14 attend, never had the opportunity to cross examine. The
15 subject matter we contend was irrelevant, immaterial; and
16 for those three specific reasons, we submit that these
17 two exhibits should be --

18 THE COURT: What about that?

19 MR. ANDERSON: Your Honor, our motion to permit the use
20 of both trial testimony and deposition testimony in the prior
21 litigation was brought last year just so that any question of
22 the right of cross examination could be taken care of. And
23 in Paragraph 1 of the order that the Court entered, your Honor
24 has indicated that this entry of the order back in December
25 of 1981 permitted time, if any defendant wished, to either

1 take further deposition or cross examine the witnesses.
2 They had the opportunity to do so from December 18th of last
3 year up until today. And they elected not to do so.

4 So, I think there is no basis for now complain-
5 ing that they had no right to examine these witnesses who
6 did testify in very heated, interparty, adversary proceedings.
7 The relevance and materiality, I think, we have already dealt
8 with. I won't discuss those again.

9 MR. COOK: Your Honor, these were depositions as I
10 recall --

11 THE COURT: Before you make a comment, Mr. Cook, I have
12 finished reading your respective memorandum. And I noticed
13 that both parties in this case relied in whole or in part
14 on the record before Judge Grady.

15 For example, Mr. Cook, in your memorandum,
16 trial memorandum, you relied on some statement that Mr.
17 Anderson made during that trial.

18 MR. COOK: That's correct.

19 THE COURT: And on the other hand, Mr. Anderson proceeds
20 to quote Judge Grady.

21 I get the impression that the theory is that
22 this case is bound by the determinations by Judge Grady. Is
23 that right?

24 MR. ANDERSON: Very definitely, your Honor, that is
25 certainly our position.

MR. COOK: That is certainly --

THE COURT: Please let me finish, Mr. Cook. I will hear you out. Let me first explore that with Mr. Anderson so I understand what he is saying.

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1 The general rule is that in a suit between A and
2 B, followed by a suit between A and C, C is not bound by
3 proceedings that took place in the suit between A and B
4 because, just as what Mr. Cook said, C was not present,
5 C did not have an opportunity to be heard, C was not heard
6 in that proceeding.

7 Now, that is the general rule, isn't it?

8 MR. ANDERSON: I think in general that would be the
9 rule subject to various exceptions.

10 THE COURT: Well, first, let us agree on the general
11 rule. That is the general rule. Why? It is very
12 elemental. C, not having been a party in the suit between
13 A and B, cannot be foreclosed as to any contention that
14 C makes in defense of a suit by A against C.

15 Now, what exception now applies? By the way, bear
16 in mind, it is different with regard to A. A could be
17 bound by various doctrines of preclusion because A was
18 there, A litigated, A had an opportunity to be heard with
19 regard to the matters between A and B and A could make an
20 admission, could take a position in the suit between A
21 and B that would be binding on A when A sues C, which is
22 our case now, isn't it, using that formula, isn't that
23 right?

24 MR. ANDERSON: Yes, your Honor.

25 THE COURT: Now, what exception would apply to make

1 binding upon C and let's assume that C is the defendant
2 here -- A and B is Chicago Dynamics and the plaintiff.

3 MR. ANDERSON: Your Honor, this is --

4 THE COURT: On what theory?

5 MR. ANDERSON: -- this is not a situation of res
6 judicata or any such effect as that.

7 THE COURT: No, no.

8 MR. ANDERSON: The cases say, Judge Crowley entered
9 an order in this case that this evidence would be admis-
10 sible as though taken in this case and that does not
11 preclude Mattel from bringing in new evidence. They are
12 doing that, as your Honor knows.

13 It does not preclude them from trying to, in
14 some way, show that there was not a full fair trial.

15 THE COURT: All right.

16 MR. ANDERSON: But ever since *Blonder-Tongue vs.*
17 *University of Illinois Foundation* on collateral estoppel,
18 I think the Courts have tended and very definitely in the
19 Seventh Circuit, tended to apply the rules bilaterally
20 and compel the second defendant to come in with new
21 evidence or show that the first trial was not a full,
22 fair trial, and failing to do that, then the first case
23 should be construed against them and that's all we are
24 contending. We are not trying to say Mattel has no stand-
25 ing to be here.

1 THE COURT: Let me tell you a thought that occurred to
2 me after reading your memorandum. There is no question about
3 the fact, the legal fact that Judge Grady held a hearing,
4 that is a fact, isn't it?

5 MR. ANDERSON: Yes, your Honor.

6 THE COURT: And the fact that he found in favor of the
7 plaintiff, that is a fact. Now if that fact is relevant and
8 material to this case, to that extent, it is evidence like
9 any other fact is evidence.

10 Also, I can see, as you just said, and I'm not
11 questioning it, Judge Crowley entered the order making the
12 parties bound by the evidence taken before Judge Grady -- is
13 that what he did?

14 MR. ANDERSON: No, your Honor. Do you have the order?
15 I think the order merely recites that the evidence can be
16 used in this case as though taken in the prior case.

17 THE COURT: Is that the order that I have before me now?

18 MR. ANDERSON: That is not the one I just handed up,
19 your Honor.

20 THE COURT: What other order is it?

21 MR. ANDERSON: This is the order your Honor entered.

22 THE COURT: May I see it?

23 MR. ANDERSON: The order I handed up this morning, this
24 is the order dated April 15th. It is the same order. I am
25 sorry. It is dated April 15, 1981. And this is the one that

1 relates to the use of the deposition testimony and just how
2 it can be used and for what purposes and the fact that there
3 can be testimony brought in by way of direct or cross
4 examination of the witness, party, or deponent whose trial
5 or deposition testimony was taken in any one or more of the
6 prior cases.

7 That is your Honor's order. I am sorry.

8 THE COURT: But the order you gave me, Mr. Anderson, is
9 a different order. I don't want to have to sit down here and
10 compare the two. The one you handed to me which has a minute
11 order of December 21, 1981 -- you handed me an order which
12 is dated February 22, 1979.

13 MR. ANDERSON: Your Honor, if I did, I must have --

14 THE COURT: Suppose I handed that to you. Look at it
15 and then give me the order that you have in mind and I will
16 look at it.

17 MR. ANDERSON: The order that I have in mind is the one --
18 your minute order docketed December 21, 1981.

19 THE COURT: All right.

20 MR. ANDERSON: Which entered this order which I have
21 handed you which we had prepared. It is a draft order
22 that we prepared at an earlier date.

23 THE COURT: All right.

24 MR. ANDERSON: But that is the order which your Honor
25 entered with the minute order on December 18, 1981.

1 THE COURT: Mr. Cook, do you understand it as Mr. Anderson
2 is stating it?

3 MR. COOK: It is very difficult to keep track, your
4 Honor, of the various orders. I have a copy of the order which
5 I think bears your signature. It bears the date of the
6 18th of May or December, 1981.

7 THE COURT: December 21, 1981.

8 MR. COOK: No. Mine says the 18th day -- it was May.
9 It is stricken out. It looks like it is December, 1981.
10 It bears your signature on it.

11 THE COURT: Yes.

12 MR. COOK: And it is in the consolidated cases.

13 THE COURT: Yes.

14 MR. COOK: 3159 through 4124.

15 THE COURT: How does that order read that you are
16 referring to? Read it out loud for the record.
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MR. COOK: Paragraph 1 which I believe is the one which is in inquiry, in issue:

"Any deposition or trial testimony taken in any one or more of the prior cases will be considered as having been deposition testimony taken in this action; any party to this action may make use of any deposition or trial testimony taken in any one or more of the prior cases or the transcripts thereof at the trial and in other proceedings in this action to the same extent, for the same purposes permitted by the Federal Rules of Civil Procedure as if such testimony or the transcript thereof were deposition testimony taken in this action. Where original transcripts or exhibits marked for identification or introduced during such testimony are not presently in the possession, custody or control of the party to this action or their attorney, copies thereof may be substituted for the originals. This order shall not of itself operate to prevent any party to this action, by its own notice of depositions and, where appropriate, subpoenaed from procuring further direct or cross examination of any witness, party, or deponent whose trial or deposition testimony is taken in any one or more of the prior cases."

THE COURT: All right. I have that order. All right.

MR. ANDERSON: Now, your Honor, the only issue is the admissibility of the testimony of Mr. Bushnell and Mr. Fritchie. Mr. Bushnell's deposition was taken in the prior cases. Mr. Fritchie's was at trial testimony in the prior case. I submit those are admissible pursuant to this order.

THE COURT: I'm looking at the order that was stipulated and entered into by Mr. Anderson for the plaintiffs, Mr. Gerstman for Universal Research Laboratory, Jewel Company, Osco and so forth and Marshall A. Burmeister, for Taito American.

Now, in view of all this, Mr. Cook, let me hear your objection again.

MR. COOK: My objection, your Honor, is that with respect to certain of the deposition testimony, Mr. Bushnell, it was taken in the earlier case in which Mattel was not a party. Mattel did not attend and did not have the opportunity to cross examine.

Presumably this was a deposition taken by one of the defendants in the earlier case, presumably to develop some kind of prior art. Again, your Honor, we are not challenging the validity in this case. We do have this order. We did not stipulate to the order and I don't think that it is proper to place a burden on Mattel to go back over all the depositions that were taken in the earlier case to try to clarify any potential position that may or may not

1 surface in our case. It poses a tremendous burden on Mattel
2 to go back over all the deposition testimony and try to
3 secondguess what may or may not have happened or what may
4 or may not be an issue in this case.

5 I think the objective of the order was to
6 try to consolidate --

7 THE COURT: Now Mr. Anderson, are these depositions
8 that important? This is a serious objection. It seems to
9 me there is so much confusion about this that this strikes
10 me as a very serious objection. Is it that important, these
11 excerpts?

1 MR. ANDERSON: Your Honor, I consider them to go to
2 the very issues that are being raised here. Mr. Bushnell's
3 incidentally is a deposition which we took, the plaintiffs
4 took, to develop the fact and the evidence shows the fact
5 that the Pong game that was the next step after Odyssey,
6 came directly from Mr. Bushnell, going to a demonstration
7 of the Odyssey game, at the time it was introduced in May
8 of 1972, and then follows from that the testimony of
9 Mr. Baer and the exhibits that we have talked about will
10 show how this TV game, television game industry came
11 into being.

12 I think it is relevant. I think we took it.
13 I think the order that the Court entered gave more than
14 adequate notice to all parties.

15 THE COURT: Well, Mr. Cook, do you concede that there
16 was notice given to Mattel when these depositions were
17 taken?

18 MR. COOK: Your Honor, I don't see that at all.
19 I don't think they were taken during our case or in any
20 of the consolidated cases. This deposition, as I understand
21 it, was taken in the prior action and we were not a party.

22 THE COURT: You are only talking really about the
23 Bushnell deposition, isn't that right, and Fritchie,
24 I assume?

25 MR. ANDERSON: Mr. Fritchie testified at the trial

1 about the work that was done in first introducing the
2 Odyssey game in the marketplace and what happened after
3 that. I think, again, it goes to this very issue we are
4 talking about. I didn't mean to say that Mr. Cook or
5 his clients had notice in 1976 of these, but I am familiar
6 with he had more than adequate notice last year of our
7 intent to use some of these and he could have acted then
8 if he wanted any cross examination. I just don't think
9 that should be a reason for keeping this evidence out of
10 this case.

11 THE COURT: Am I not correct that Exhibits 161 and
12 162 are different than Exhibits 159 and 160 in that 161
13 and 162, as I read this description, transcript of
14 deposition testimony of Mattel, Inc.

15 MR. ANDERSON: Yes. Those are not in contention.
16 Only 159 and 160, I think.

17 THE COURT: Only those two?

18 MR. COOK: That is correct.

19 THE COURT: All right.

20 MR. COOK: I think the Court should appreciate, your
21 Honor, there is about, oh, I don't know, 15 to 20 deposi-
22 tions that were taken on the prior Chicago Dynamics case
23 and I have a list of them right here if the Court is
24 interested in pursuing them. I don't think it was the
25 intent of yourself or Judge Grady or anybody involved in

1 drafting the order to impose that kind of a burden on
2 this defendant in this case.

3 THE COURT: Well, let me now look -- will someone
4 please hand me, because I don't find it in this packet of
5 exhibits -- will you please hand me Plaintiffs' Exhibits
6 159 and 160?

7 MR. ANDERSON: Your Honor, I hand the Court Plain-
8 tiffs' Exhibits 159 and 160.

9 THE COURT: Are these the excerpts or are these the
10 depositions?

11 MR. ANDERSON: Those are the excerpts, your Honor.

12 THE COURT: Now, in view of the objection, Mr.
13 Anderson, would you please state for the record what is
14 the relevancy, materiality and probative weight of
15 Exhibit 159? What is it?

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1 MR. ANDERSON: Your Honor, the relevance is that this
2 goes to the creation of the industry, of the television
3 game industry, it goes to the commercial success of the
4 '507 patent and those have been held in prior decisions
5 to bear upon the scope of what the invention and the scope
6 of the claims that are to be recognized in determining
7 infringement and at a prior argument on this, I cited
8 the Acme case at 473 F.2d but there are others, and your
9 Honor, I think this was fully briefed, and Mattel had
10 a full opportunity to brief this issue.

11 THE COURT: Yes, I know. Prior to the entry of this
12 order?

13 MR. ANDERSON: Yes, your Honor, that is correct,
14 and with full recognition and full argument with respect
15 to whether or not this could be used for trial and whether
16 or not they had an opportunity to cross examine. The
17 relevance and materiality --

18 THE COURT: You don't mean that. What you mean is
19 whether or not they had an opportunity to have deposed
20 Mr. -- is it Fritchie?

21 MR. ANDERSON: Fritchie, yes, your Honor.

22 THE COURT: And Mr. Bushnell.

23 MR. ANDERSON: Yes, your Honor.

24 THE COURT: That's what you mean, isn't it?

25 MR. ANDERSON: Yes, your Honor.

1 THE COURT: Now, with regard to Mr. Bushnell, it was
2 a deposition that was taken of him and you are saying that
3 pursuant to this order, the defendants had an adequate
4 opportunity way back in December 1981 to have deposed Mr.
5 Fritchie and Mr. Bushnell concerning what they had said,
6 one at the trial before Judge Grady and the other at his
7 deposition. That's the point you are making, isn't it?

8 MR. ANDERSON: Yes, your Honor.

9 THE COURT: All right. Mr. Cook?

10 MR. COOK: Your Honor, there may have been an opportunity
11 but it was an illusory opportunity. As I indicated before,
12 there were about 20 depositions taken in the earlier case.
13 To place Mattel in the position where it had to go back
14 over those 20 depositions and determine which ones would
15 merit further investigation and which ones would be the
16 subject of additional notice, I think is an awful burden
17 on Mattel.

18 I don't think that was the intent of the order,
19 your Honor. The intent, as I understood it, was to try
20 to simplify discovery proceedings and spare Magnavox the
21 burden of going back through some of the earlier problems
22 they had. We were sympathetic to that to a point but
23 certainly if Magnavox intended to rely upon these witnesses
24 in this case, they should have brought them into court
25 or they should have taken their depositions so we would

1 have some notice of what they were doing.

2 It is inappropriate to place Mattel in a Catch
3 22 situation and we submit that Magnavox had the opportunity
4 to put us on notice or tell us what they were going to do.

5 Further, they had the opportunity to bring
6 these witnesses into court and they didn't do it.

7 MR. ANDERSON: Your Honor, --

8 THE COURT: Go ahead.

9 MR. ANDERSON: The same issues were raised, the same
0 arguments were made at the time your Honor entered the
1 order back in December of 1981. Mattel contended that
2 it was not a successor in interest and we cited the cases
3 that there was a predecessor in interest present because
4 the parties there had the same interest in adjudicating
5 the patents that Mattel has and we cited various cases
6 as to that and we argued and Mattel argued on the issue
7 of whether they had an opportunity to examine and we
8 specifically argued and the Court entered an order after
9 hearing and reading all of these arguments where Mattel
0 contended they would not have an opportunity to cross
1 examine. We argued they did have an opportunity because
2 of the time involved, the period of time from the time
3 we gave the notice and argued the motion to use this testi-
4 mony up until today when the trial is in process.

5 So I believe this evidence should be admissible
6 and Mattel can argue as it sees fit as to the weight to be
7 given to it, but I think clearly it should be admitted.

1 THE COURT: Mr. Cook, isn't it true, as Mr. Anderson is
2 contending, that Mattel had notice of this proceeding that
3 led to the entry of the order and the minute order of
4 December 21, 1981?

5 MR. COOK: That is correct, your Honor. In fact, we
6 did file briefs, I think, in opposition to the opposed order.

7 THE COURT: Now let me look at the order that was entered.

8 Just in the event this question should rise
9 again, Mr. Anderson, I notice that the order -- by "the order"
10 I mean the order that has a date on it that says February
11 22, 1979, but would you tell me, and I'm going to have to
12 rely upon this representation because I don't have the time
13 to go and analyze the docket, is the order that was entered
14 and appended to the minute order of December 21, 1981 --
15 I notice that Mattel is neither mentioned in the order,
16 nor is there any lawyer signing the order as an agreed order
17 on behalf of Mattel. Am I right?

18 MR. ANDERSON: Your Honor, certain parties agreed to
19 that order but then the Court entered the order with respect
20 to the parties who opposed it and perhaps --

21 THE COURT: Mr. Grice -- I am sorry. Will you hand that
22 to me?

23 MR. ANDERSON: The order as it was submitted and I
24 believe as it was attached to your minute order is the one
25 that I will hand to the Court now.

1 THE COURT: All right.

2 MR. ANDERSON: It doesn't show the agreement of certain
3 parties to it. Mattel opposed. They did not agree to it.

4 THE COURT: All right.

5 MR. ANDERSON: The order was entered after extensive
6 briefing by your Honor in December, 1981. I think the language
7 is the same, however.

8 THE COURT: All right.

9 MR. COOK: Your Honor, perhaps it might be appropriate
0 to just simply take this under advisement.

1 THE COURT: Wait a minute. Just a minute, Mr. Cook.
2 This is about the admission in evidence of a plaintiffs'
3 exhibit. I want to complete the record now and close the
4 record after the exhibits of the plaintiffs. And then I
5 will hear -- do I understand correctly you are going to rest
6 now, Mr. Anderson?

7 MR. ANDERSON: Yes, your Honor.

8 THE COURT: All right. Let's do it. Let us take the
9 time necessary and do it. I just don't want to see any
0 documents from any other court telling me that as I sat
1 here I overlooked the fact that Mattel was not a party to
2 this proceedings that entered this order. I am satisfied now
3 and I so find that Mattel was a party to the proceeding that
4 led to the order of December 21, 1981 because you tell me that
5 Mattel was. You said you filed the brief in opposition to the

1 entry of this order.

2 MR. COOK: That is correct, your Honor.

3 THE COURT: So, therefore, I want to look at this order
4 and see what it says.

5 Mr. Anderson, do you have a copy of this order
6 before you?

7 MR. ANDERSON: I think I have. Yes I do, your Honor.

8 THE COURT: Would you just look at it as I read this
9 do you see any significance as to the fact that in the first
10 paragraph of this order there is reference specifically to
11 the following cases: Magnavox Company et al. versus Bally
12 Manufacturing Corporation, 74 C 1030. That is not one of
13 the consolidated cases, is it? It is obvious that it isn't.

14 MR. ANDERSON: No, your Honor.

15 THE COURT: The Magnavox Company et al. vs. Seeburg.

16 MR. ANDERSON: No, your Honor. Those were the earlier
17 cases.

18 THE COURT: These were the earlier cases.
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1 MR. ANDERSON: Those were all the '74 and '75 cases
2 that were disposed of at the time of or before Judge
3 Grady's decision in 1977.

4 THE COURT: And the testimony of Mr. Fritchie was
5 given in 74 C 1030, wasn't it? I am looking at it right
6 here.

7 MR. ANDERSON: Yes, your Honor, that's correct.

8 THE COURT: So that is the case that is referred to
9 in this order, am I not right?

10 MR. ANDERSON: Yes, your Honor.

11 THE COURT: All right. And the deposition to which
12 objection is being made and the excerpts taken therefrom
13 is also taken in the same case?

14 MR. ANDERSON: Yes, your Honor.

15 THE COURT: All right, I just want to be sure about
16 that.

17 MR. ANDERSON: Yes, that's correct.

18 THE COURT: And this action refers to 77 C 3159,
19 which is one of the consolidated cases in these proceedings.

20 MR. ANDERSON: I think it refers to all five of those
21 proceedings, your Honor.

22 THE COURT: Well, it says except --

23 MR. ANDERSON: I'm not sure where you are reading from.

24 THE COURT: I am reading from the order. It says
25 Civil Action No. 77 C 3159 and 77 C 3159 is one of the

1 consolidated cases.

2 MR. ANDERSON: Yes, your Honor.

3 THE COURT: All right, I just want to be sure about
4 that.

5 MR. ANDERSON: We have the order with your signature
6 on it. Perhaps we should hand that one up to your Honor.

7 THE COURT: Let me see that.

8 MR. COOK: This is our entire pleading file.

9 THE COURT: I will give it back to you.

10 MR. ANDERSON: I don't believe there is any difference
11 in the text of the numbered paragraphs.

12 THE COURT: I think there's enough witnesses here,
13 Mr. Cook.

14 These orders, I suppose they are the same,
15 aren't they?

16 MR. ANDERSON: Except for the introductory paragraph,
17 I think the text of the numbered paragraphs are substan-
18 tially identical and in every matter of substance identical.

19 THE COURT: All right, that order was entered
20 December 18, 1981, so I will read from that order, the
21 one that bears my signature, all right.

22 MR. ANDERSON: Thank you, your Honor.
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1 THE COURT: All right, I have read this. Do you want
2 to return this to Mr. Cook, Mr. Clerk?

3 I think that order plainly states the trial
4 testimony of the trial cases, 74 C 1030 and 74 C 2510,
5 either deposition or trial testimony will be treated
6 as deposition admissible in evidence subject to the right
7 of any party to take further discovery and to meet whatever
8 effect of those excerpts or depositions or trial testimony
9 may have. So, the objection will be overruled. They are
10 admitted in evidence. I'm satisfied that's what the parties
11 became bound by upon entry of that order of December 21,
12 1981. And that particular order was signed on December 18,
13 1981.

14 MR. ANDERSON: Thank you, your Honor.

15 (Plaintiffs' Exhibits Nos.
16 159 and 160
were received in evidence.)

17 MR. COOK: Thank you, your Honor.

18 The last objections deal with Exhibits on
19 Page 11 also, Plaintiffs' Exhibits 165 and 166. To be
20 consistent, I will raise the same objection. These relate
21 to electric components that were apparently embodied in
22 Magnavox's Odyssey. I do this with the expectation the
23 Court will overrule it as he has with the previous exhibits.

24 MR. ANDERSON: They fall in the same category.

25 THE COURT: Objection overruled. They are admitted in
evidence.

1 (Plaintiffs' Exhibits 165 and 166
2 were received in evidence.)

3 THE COURT: Now, Mr. Anderson, I invite you to submit
4 an index of all the exhibits now in evidence, because this
5 list you have here includes some exhibits which have not
6 been offered.

7 MR. ANDERSON: We will certainly do that, your Honor.

8 THE COURT: Just for the purpose -- and that index of
9 the exhibits in evidence will have to be correlated with the
10 record to show the exact exhibits that have been admitted in
11 evidence.

12 MR. ANDERSON: We will do that just as soon as possible.
13 thank you.

14 THE COURT: All right.

15 And as I understand it, the plaintiff rests?

16 MR. ANDERSON: Yes, your Honor, the plaintiffs rest.

17 THE COURT: All right.

18 THEREUPON THE PLAINTIFFS RESTED THEIR CASE IN CHIEF
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1 MR. COOK: May it please the Court, your Honor, at
2 this time on behalf of Mattel would like to bring a motion
3 for dismissal under Rule 41(b) of the Civil Rules of
4 Procedure, specifically on the grounds that Magnavox has
5 shown no right to relief as specified in the Rule.

6 If I may, your Honor, I'd like to hand up to
7 the Court written copies of the motion, memorandum in
8 support of the motion and proposed findings of fact and
9 conclusions of law as contemplated by Rule 41(b).

10 THE COURT: All right.

11 MR. COOK: Also hand an additional copy for the
12 Court's convenience, and also serve copies of these three
13 documents on opposing counsel.

14 Your Honor, Mattel makes --

15 THE COURT: Give me just one moment to look at it.

16 Now, these are the originals, are they not?

17 MR. COOK: In your right hand, the Court has the
18 originals; and in your left hand is copies, your Honor.

19 THE COURT: Do I have here copies of everything in
20 the originals?

21 MR. COOK: That's correct. You should have three
22 copies: the motion, memorandum in support of the motion
23 and the proposed findings of fact and conclusions of law.

24 THE COURT: In what respect does this memorandum
25 in support of Mattel's motion for dismissal differ from

1 the memorandum of trial you submitted earlier?

2 MR. COOK: It is dramatically different, your Honor,
3 because it is a memorandum that's been fashioned in support
4 of the motion brought under Rule 41(b). It therefore
5 specifically relates solely to Magnavox' evidence or
6 lack of evidence on the question of infringement.
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1 THE COURT: All right, you may proceed, Mr. Cook.

2 MR. COOK: Your Honor, because of the recess we had
3 an unusual opportunity to review and evaluate the testimony
4 of Dr. Ribbens. I was struck with the insufficiency of
5 the evidence in establishing infringement.

6 I must confess that initially I felt there could
7 be a debate about whether or not the plaintiff had estab-
8 lished a prima facie case and I was so much surprised
9 to find in very carefully reviewing Rule 41(b) that the
10 test at this stage of this proceeding to this Court,
11 absent a jury, is not whether or not plaintiff has estab-
12 lished a prima facie case and the standard is not are all
13 doubts resolved in favor of plaintiff and are all the
14 presumptions to be treated in favor of the plaintiff.

15 On the other hand, the test is whether or not
16 a case has been made out and whether the plaintiff is
17 entitled to relief on the facts and under the law.

18 We very carefully digested the testimony of
19 Dr. Ribbens. We have set it forth in our memorandum in
20 support of our motion. We have also quite extensively
21 treated the subject in the proposed findings of fact and
22 conclusions of law, which I think the Court will find is
23 a much more specific recital of the testimony of Dr.
24 Ribbens, and in fact, the inadequacy and insufficiency
25 of a showing of infringement.

1 We treated each of the six accused products
2 specifically. We have treated the testimony of Dr. Ribbens
3 with respect to each of the products and we quite clearly
4 point out to the Court that there is no basis for infringe-
5 ment.

6 In addition to that, we have asserted that the
7 doctrine of judicial estoppel should be fully applicable
8 to Magnavox primarily because of the prior representations
9 made about computer-based games in the prior litigation.
10 There is no question about the fact that Mattel is manu-
11 facturing and selling a computer-based video game.

12 Your Honor, I don't bring these motions routinely.
13 In fact, I can't recall of ever bringing such a motion
14 before. I think in view of the evidence that's been
15 developed, it is quite appropriate.

16 I know that the opposing party has not had a
17 chance to look at it, and I think in fairness to the other
18 side, we might have a short recess and they would have an
19 opportunity to read it and respond to the Court and during
20 that recess perhaps the Court might give some further
21 thought to the issues that are raised in the motion and
22 the supporting memorandum and specifically review the
23 proposed findings of fact and conclusions of law.

24 Under the present circumstances, in view of
25 the evidence adduced by Magnavox, we contend that they have

3
1 failed to satisfy the burden of proving by a preponderance
2 of the evidence that the accused video games infringe the
3 asserted claims.

4 We also submit, your Honor, that they have failed
5 in their burden to establish that there is any real identity
6 of means, operation or result between the Rusch patented
7 circuit and the video games accused of infringement, and
8 lastly, as I have indicated a moment ago, we believe that
9 Magnavox should be judicially estopped because of the prior
10 representations in the prior case.

1 All of this in great detail is set forth,
2 your Honor, and I submit that Mattel is entitled to judgment
3 and we request that judgment be entered under Rule 41(b)
4 in accordance with the specific provisions of that rule,
5 and I guess I would say in closing, your Honor, that I would
6 think it is appropriate maybe to have a recess and give an
7 opportunity to the other side to read the memorandum and
8 the proposed findings and perhaps maybe we could return
9 at 1:00 o'clock in the event that that's an appropriate time
10 to proceed. Thank you very much.

11 MR. ANDERSON: Your Honor, I have just seen these
12 documents but I don't think there is any purpose to be served
13 in taking an hour to read them because just from scanning
14 them I think it is so clear that the documents reflect error
15 of law and misinterpretation of facts.

16 First of all, the law that the defendant
17 cites is misstated, I feel, in that with respect to this
18 last statement that counsel made about identity of means,
19 operation and results, the Seventh Circuit has just spoken
20 out specifically on that in the Deere case. It's Deere &
21 Company vs. International Harvester, 658 F. 2d, a case decided,
22 reported at 1137 and decided July 29, 1981. They specifically
23 say with respect to means, any identity of means, operation
24 and result, you look at the claim. You don't look at the
25 specific embodiment of the invention.

1 The Court quotes an older case, a Seventh
2 Circuit case in 1945 that said:

3 "There must be real identity of means,
4 operation and results."

5 And there International Harvester tried to
6 say that they used a two-piece shaft and the Deere patent
7 only showed a one-piece shaft and therefore there wasn't
8 that identity. Judge Wood in that Seventh Circuit decision
9 in 1981 said:

10 "First, it is necessary to note that it
11 is the claim and not the preferred embodiment which
12 is to be used for that comparison."

13 And that's not what Mattel, the defendant,
14 has done here.

15 Second, on the facts, your Honor, you have
16 heard the testimony, you have seen the depositions, you have
17 heard the testimony of Mr. Baer, you heard the testimony
18 of Mr. Ribbens. I think there is so clearly issues raised --
19 at least we feel we have made out our case, but certainly
20 there are issues raised that can't be disputed about exactly
21 what defendant can possibly contend don't constitute the
22 means of the claim, means for generating a hitting symbol,
23 the tennis player, the football player, the defensive
24 captain, the batter in the ballgame, means for generating
25 a hit symbol, the bat, the ball or the puck. There just

1 can't be any issue that those are what are referred to.

2 Means for ascertaining coincidence, they
3 argue, well, it doesn't quite hit, and you heard that argument.
4 It is only when it ascertains approximate coincidence, and
5 finally the means for imparting a distinct motion, the
6 ball going back, the ball being caught and carried. I just
7 think we would be wasting an hour of your time and our time
8 and to no real purpose if we delayed going forward with
9 Defendants' case at this time, and I would like to proceed,
10 your Honor.

11 MR. COOK: Your Honor, let me just have a short rebuttal.

12 Apparently there was a recent case decided
13 by the Seventh Circuit, but I don't think it's changed the
14 law in the Seventh Circuit. The Deere vs. International
15 Harvester case to which counsel just referred quite properly
16 does talk about the fact that in an infringement case you
17 are talking about the claims. We agree with that. We
18 don't oppose that.

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But, your Honor, it is quite clear that the patent statute, 35 USC 112, directly applies to this particular situation, I would quote the last paragraph as follows:

"An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material or acts in support thereof, and such claims shall be construed to cover the corresponding structure, material or acts described in the specification and equivalence thereof."

And the doctrine of real identity of means, operation, result evolved, I suppose, out of this specific statutory case.

Your Honor, I do think that because of the insufficiency of evidence in this case, that it is quite appropriate for the Court to take whatever time is necessary to evaluate at least the positions that we have presented to the Court. And if the other side wants to waive its right to respond, that's fine, but I do think it is appropriate to take the time, whatever is needed, maybe 15, 20 minutes, or a half hour or an hour at the Court's pleasure. But I would like to urge the Court to do what it has to do by way of evaluating the motion that Mattel brings with the utmost conviction that it is quite an appropriate way to

1 dispose of this case and to eliminate, if possible, a couple
2 of weeks of unnecessary trial.

3 And I think, your Honor, the position we find
4 ourself in at the present time is directly attributable
5 to what I would characterize as Magnavox's overreaching
6 position. It is his trying to go too far. Maybe success
7 has become an intoxicant put on his head. But in this
8 particular case, your Honor, we think the line should be
9 drawn and we think as quick as the line should be drawn, the
10 better.

11 Thank you, your Honor.
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1 MR. ANDERSON: Your Honor, I just again respond to
2 what Mr. Cook seems to be saying, as he believes he can
r 3 prove somehow that the infringing product uses certain
4 means that aren't the equivalent of the means recited in
5 the claims.

6 Now, that is his burden, and he is certainly
7 entitled to try to prove it, but I don't think there is
8 any basis -- and we may put in rebuttal once we hear what
9 he contends. But I think at this point in time we should
10 go ahead with the proofs.

11 MR. COOK: May I just respond to the last comment,
12 your Honor?

13 THE COURT: Yes, all right.

14 MR. COOK: It is not our burden to establish infringe-
15 ment. That rests and reposes in the plaintiff. And it
16 is quite clear in the law. And we submit they have not
17 satisfied the burden and that is why we bring the motion.

18 THE COURT: All right, the motion is denied. I am
19 quite familiar with the standard of Rule 41(b). I went
20 over this very carefully in the Marshall Field case and
21 in the other cases, at least two of them cited in this
22 memorandum.

23 The motion is denied. And you can always renew
24 the motion at the close of all the evidence. But I think
25 there is sufficient evidence here to justify the denial

of the motion.

I went over this motion, too, during the recess, because, as I told you, I took the material on my trip to Massachusetts and I had adequate time to review my trial notes and the case law that you have cited in both memoranda.

The motion is denied.

Now, if you wish, Mr. Cook, I will continue the matter until 1:00 o'clock and we will begin at 1:00 o'clock with the defendants' case.

MR. COOK: Well, your Honor, if you want us to proceed, we could take a short break and continue; or we could start at 1:00 o'clock, whatever is the Court's pleasure.

THE COURT: All right, then we will take a two-minute recess.

(Brief recess)

1 THE COURT: You may proceed.

2 MR. COOK: Thank you, your Honor. At this time I would
3 like to tender to the Court a book of exhibits as well as
4 a file for exhibits.

5 Your Honor, we are identifying the exhibits
6 in lower right-hand corner as DX-A, B, C et cetera, in
7 accordance with your Honor's order. Where there is a
8 physical exhibit, there is a piece of paper in the book and
9 a cross reference to that physical. Where there is a large
10 packet of papers or a large document, it is cross referenced
11 to the file case which I have and am now presenting to the
12 Court.

13 THE COURT: Mr. Grice, would you take those. Just bring
14 them around here. Put that box right next to them. Put the
15 box right on the floor here next to me. All right, thank you.

16 MR. COOK: Your Honor, we would like to call at the
17 present time Dr. David P. Chandler as Mattel's first witness.

18 THE COURT: You may come forward and be sworn.

19 (Witness sworn.)

20 THE CLERK: Be seated, please, and state your name,
21 spell your name, lean forward, speak directly to this
22 microphone, keep your voice up.

23 THE WITNESS: David P. Chandler, C-h-a-n-d-l-e-r.
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1 DAVID P. CHANDLER,
2 called as a witness by the defendant, having been first truly
3 sworn, was examined and testified as follows:

4 DIRECT EXAMINATION

5 BY MR. COOK:

6 Q At what address do you presently reside, sir?

7 A 9754 Belder Drive, in Downey, California.

8 Q For how long a period have you lived in Downey,
9 California?

10 A 32 years.

11 Q What's your age, sir.

12 A I am 58.

13 Q Would you please briefly review your educational
14 background.15 A I started out at Georgia Tech in 1941 in mechanical
16 engineering, in 1944 was drafted, at that point wound up in
17 the Army's college program at North Carolina State College
18 where I completed nine months of education, by transferring
19 from Georgia Tech was able to get a Bachelor's Degree in
20 Electrical Engineering.

21 Q When was that, sir?

22 A I got the degree in 1946, finished the work in 1945.
23 After I got out of the Army I went back to Georgia Tech and
24 finished out my Bachelor's Degree in Mechanical Engineering,
25 which I got in 1947.

1 I then went to Carnegie Tech in Pittsburgh,
2 got my Master's Degree in Electrical Engineering in 1948 and
3 my Doctoral Degree in Electrical Engineering in 1951.

4 Q Is that from Carnegie Tech?

5 A That's right.

6 Q Did you attend Cal Tech at any time throughout this
7 period?

8 A Yes, I was at Cal Tech for one year, from 1948 to
9 1949.

10 Q Are you a member of any professional societies?
11 If so, would you please identify them?

12 A Yes, I am currently a member of IEEE, Institute
13 of Electronical and Electronics Engineers, have been a member
14 of AIAA, American Institute of Aeronautics and Astronautics,
15 and as a representative from AIAA was their representative
16 on the American Automatic Control Council for the United States.

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Q Any other societies?

A There have been several others that I have been a member of, Institute of Navigation, the American Rocket Society originally. I think that's it.

Q Do you remember the Briaerean Society?

A There are several honor societies that I am a member of. The Briaerean Society is one of them, Tau Beta Pi, Phi Kappa Phi.

Q Have you been an author of any articles or any book?

A Yes, I was co-author of a book on inertial guidance and have authored several papers. There were two papers on magnetic amplifiers, one in which I was the sole author, one in which I was the a co-author.

There was a couple of papers on platform stabilization, technique for maintaining stabilized platforms for inertial guidance systems.

I was author of a paper on landmark tracking techniques for doing space navigation.

Q Have any patents been issued in your name?

A Yes, I have two patents that have been issued in my name, one having to do with a connector system and another having to do with a switch system.

Q In what areas have you specialized in your professional career?

A I guess I would say my primary specialty is systems engineering, which is kind of an overall function of engineering, within that, computers, computer science, automatic control systems.

Q Would you briefly review your employment background.

A Prior to graduating from school I had a number of teaching positions, but starting at the point of getting my doctorate I went to work for what was then North American Aviation in Downey, California, in a group that later became their Autonetics Division.

The work that I was doing initially and for several years was in their inertial guidance area. I started out as an engineer in their platform circuit unit, about six months later became supervisor of that unit.

The work that we were doing there was the electronics side and the automatic control side of stabilizing a platform, which is a base for inertial navigation systems, very high precision work.

Several years later I became supervisor of the electronics research unit, a new group that we formed within the inertial guidance division of Autonetics by that time. In that area I had responsibility for the advanced research work in all of the facets of the electronics

for the inertial guidance division. That included digital computers as well as circuitry for sensors and that variety. It was in that area that some of the work that I did provided a basis for a computer that became an enabling system for us to be able to get the Minute Man guidance and control contract a couple of years later.

I then became, for a brief period of time, supervisor of Electronic Standards Unit within the Inertia Navigation Division; and then became the group leader, actually, I guess the title was Project Engineer, for the Advanced Projects Group. And it was in that capacity that I headed up the Technical Proposal Team that proposed the Minutemen guidance control proposal which was the largest contract that Autonetics has ever had, actually I guess it still is.

I then moved to being the Section Chief for the Preliminary Engineering Section for the Inertia Guidance Division.

And then in about 1963, we formed a new division within the Autonetics Division which was called Standardized Space Guidance Division. I was chief engineer of that division when we formed.

Q How long did you stay in that capacity?

A That was about two years I recall.

And then we converted that division into what we call the Astrionics Division, somewhat broader set of responsibilities. I became the Assistant to the Director of that division, and then later the chief scientist for that division. And while I was in that assignment, I was, for one year, on a special assignment to Stanford University as a visiting professor at Stanford University, a program they

1 had worked out with industry to just exchange for a one-
2 year period.

3 Q During what period of time was that?

4 A That was 1967 to '68.

5 I, in that general time period, had developed
6 some concepts and some definitions for what would now be
7 called a word processor system. And after I got back from
8 Stanford, about six months or so, I was put on a special
9 assignment as assistant to the vice president of the Standards
0 and Controls Division, I believe it was called, but special
assignment was to go pursue the development of this concept
for, as I say, what we would now call word processor system.

It was in that time frame that the Rockwell
merger with North American took place and the cash flow
problems that North American had got severe enough that we
had complete change of management, complete change of
policies. They stopped all advanced development work, including
the project that I was on.

Eventually, out of that, I pulled out of
North American in late 1969, really in 1970, and proceeded
to form a separate company to go pursue the development of
this word processor system.

1 Q What was the name of that company?

2 A We called it Chandler Business Machines, Incorporated,
3 in January of 1972. The effort prior to that was
4 getting it organized and getting enough finances to
5 get it started.

6 We were able to get enough finances to carry
7 out the prototype development of the system we were talk-
8 ing about, but were not able to get enough funding to
9 go into production or to get it placed with a large
0 company.

1 Q Did you have a title with the Chandler Business
2 Machines Company?

3 A I was president of the company.

4 Q Approximately how many shareholders did the
5 Chandler Business Machines have?

6 A We had 23 shareholders, I believe, in addition
7 to the two of us that were principals in the company.

8 Q Did you have occasion to have any contact with
9 a microprocessor while employed by Chandler Business
0 Machines?

1 A Yes, several different relationships actually
2 with microprocessors; in fact, the word processor that we
3 developed would now be interpreted, I believe, as a
4 TTL, the title of logic device that existed at that
5 point; a TTL version of a microprocessor function, a

1 special purpose one.

2 We also used the earliest of the single chip
3 microprocessors that existed; namely, Mattel 4004, as
4 one of the development tools that we used for doing the
5 programming for our own system.

6 After we got the prototype developed and were
7 continuing to negotiate with larger companies to try to
8 establish relationship, a task which drug on for a very
9 long time, we started doing some consulting work in some
10 other areas. One of those was in the application of
11 an F8 microprocessor, Fairchild developed microprocessor,
12 to the control of the small printer, a typewriter-like
13 printer, for use in the data processing and word process-
14 ing industry, primarily.

15 It turned out that I was the first person in
16 the Orange County area to apply that microprocessor and
17 pretty much became known as the expert on the F8 micro-
18 processor in the Orange County area.

19 Q Is that near Los Angeles?

20 A That is a major county just next to the County
21 of Los Angeles.

22 That led to another application of the F8
23 microprocessor, which was with a small company that was
24 making coin-operated video games in the Orange County area.
25 And they wanted to have a microprocessor-based video game.

1 And I went and consulted with them; did the development
2 design for, again using the F8 microprocessor, as the
3 basis for a video game for them.
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Chandler - direct

1 Q During what period of time were you associated
2 with the Chandler Business Machine Company?

3 A Well, as I said, it was incorporated in 1972.
4 Actually, I was working on it, in getting it established,
5 from the time I left North American Rockwell and was
6 with it up until the time that I went to work for Mattel
7 in May of 1977.

8 Q Would you briefly outline your various duties and
9 responsibilities at Mattel since May, 1977?

10 A I started out as an engineer in their preliminary
11 design group of their toy division, was picking up immediately
12 the responsibilities for the, what is now the Intellivision
13 system, the development of the videogame system. And that's
14 been my primary area of responsibility from that time on.

15 Q What various titles have you held?

16 A As I say, I started out as an engineer; became a
17 project engineer about six months later. Then when we
18 split off a separate division of the toy division as the
19 beginnings of the electronic division in late 1978, I became
20 manager of a group that was being called Systems Engineering
21 Group; the primary responsibility for that Systems Engineering
22 was the Intellivision program development.

23 In I guess like January of '79, -- I'm getting
24 the years mixed up -- of '80, I guess it was, became the
25 Director of Product Engineering for that Mattel Electronics,

Chandler - direct

1 which encompassed not only the system such as the Intellivision
2 System, but the whole line of hand-held products we had as
3 well. Then --

4 Q Were these electronic hand-held products?

5 A The electronic hand-held products.

6 Then in May of 1981, we formed a new group
7 within the electronics division, which is called Advanced
8 Development, and I became director of that to start pursuing
9 some of the more advanced product areas in the total field
10 Mattel Electronics is interested in; again, chief emphasis
11 in the videogame area.

12 About six months later I became chief
13 scientist of Mattel Electronics and still director of what
14 we then called Strategic Development, which was the, titled
15 Advanced Development area; and then early this year, I became
16 a vice president of Mattel Electronics and chief scientist
17 of Mattel Electronics.

18 Q Dr. Chandler, I'd like to ask you if you can give
19 us a definition of various types of video games; home video
20 games, arcade video games and coin operated video games.

21 A The whole class, of course, is a class of games in
22 which some type of game play action is happening on a
23 videoscreen that can be seen by the players and by manipulating
24 inputs to the machine, they can cause things to happen in
25 the game and get a game play out of it.

1 What type of display is used is not critical
2 to the nature of a video game, although the bulk of them
3 at this stage of the game are using raster scan, and, of
4 course, the home video game pretty much needs to use a
5 TV set because that is what is in the home, although there
6 are a few of those that are supplied separate monitors that
7 do not use the TV set.

1 A significant difference between the coin-
2 operated video games and the home video games is the
3 difference in the nature of the experience that is needed
4 to fit the environment that's there. The coin-operated
5 video game is really geared at a short-lived experience
6 that requires the player to be through with it fairly soon
7 so he can put another quarter in and continue to play.

8 The home environment is quite a different one
9 and that's one of the things that we felt was different
0 about the type of development that we were out to do,
1 was to develop something that really fit the home environ-
2 ment instead of just translating the arcade environment
3 into the home, which is what had been done prior to that.

4 Q Are the terms "arcade video games" and "coin-
5 operated video games" used interchangeably?

6 A Yes, pretty much so, right.

7 Q Would you please define CRT device.

8 A CRT is a, the letters standing for Cathode
9 Ray Tube. It is the type of display tube that is in the
0 television set. It is also used in computer terminals
1 that have a video display for them. The significance of
2 it is that it provides a picture on the screen by a stream
3 of electronics that's controlled from an electron gun.
4 How that is controlled and how we present the picture on
5 the screen is not an essential part to the cathode ray

1 tube.

2 Q Would you compare and contrast a television
3 receiver with a monitor.

4 A Television receiver has a set of circuitry in
5 it which is capable of receiving the broadcast television
6 signals that come through the air and broadcast and, in
7 order to do that broadcasting, they have to be transmitted
8 at a higher frequency, and so the signals that contain the
9 information for picture have been modulated onto a high
10 frequency so they can be transmitted. The TV set has
11 to have the tuner circuitry, which is what it typically
12 gets called, which can accept that modulated signal and
13 unscramble it and get the signal, the composite video
14 signal it's called, that contains the information for a
15 display.

16 The other characteristic that is inherent in
17 a television receiver is that the standards in this country
18 and everywhere else in the world for that matter have been
19 built around what is called a raster scan technique for
20 displaying and that's the technique that Dr. Ribbens
21 described a couple of weeks ago very effectively.

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1 Q Have you completed your answer with respect to
2 monitor?

3 A A monitor then as opposed to a TV set does not
4 have the tuner, it does not have to receive a signal coming
5 in, does not have to use a raster scan. It gets coupled
6 directly to the electronic source that is providing the
7 information to it, and it can do what is called an X-Y
8 presentation, which simply tells the electron gun where
9 you want it to make a picture and directs it there.
10 Many monitors are raster scan. They don't have to be.

11 Q You used the term "X-Y." Can you be more
12 specific about what you mean?

13 A X and Y are frequently used as expressing the
14 directions on a presentation. In the case of the TV set
15 X would normally be the horizontal direction and Y would
16 be the vertical direction. So it is a way of identifying
17 a location on the screen. If you want to be in the middle
18 of the screen, for example, you would say X is half-way
19 over to whatever the full number is and Y is half-way
20 down the full number.

21 Q Would you please define the term "alphanumerics"
22 and "graphics"?

23 A When we get to talking about displays on cathode
24 ray tubes, there tend to be two different classes of
25 displays that get used. For the computer industry, the

bulk of displays really are just dealing with what we call alphanumerics, the character sets to provide the alphabet and the numbers, and generally a few additional characters for punctuation or special symbols to use within the computer, individual characters that are called up and asked for and the display device then converts those indications of a character into the actual display for that character.

Graphics, the term "graphics" could include alphanumerics and typically alphanumerics are used with it, but it more generally is a term used to discuss, to talk about a more complex set of pictures that you would draw with or without color. Either would be called graphics.

Q You used the term "character" in the context of alphanumerics. Does that mean a specific form of character? Could you give us examples of alphanumeric characters?

A The sense in which I was using the word "character" was to say I want to have an "A" shown up here and what the shape of that "A" is can take a lot of different forms. That would be the font, the type style that gets used, but the significance is that I can assign a code, a digital code that says this is the code I am going to use when I want to have an "A" printed on the screen and there are several standard codes.

1 The American Society of Computer Institute --
2 I don't know what the other "I" is -- the ASCII code is a
3 fairly standard accepted code and the significance of that
4 is that we can now have a variety of terminals that can
5 accept the same communication to it and say "Print this
6 message on the screen," and all you have to do is send a
7 series of those codes that indicate the individual
8 characters and then it takes it and presents those charac-
9 ters on the screen.

1 Q Is the term "alphanumeric" used to identify letters
2 of the alphabet and numbers from zero to nine?

3 A Plus usually a few additional.

4 Q For example?

5 A Commas, periods, exclamation points, question marks,
6 spaces.

7 Q What do you mean by programmable video games?

8 A The term "programmable" as it applies to video
9 games has come to be known, to be used to mean a video game
10 in which you can plug in a piece of software of some variety,
11 frequently called a cartridge or a cassette, to change the
12 nature of the game that that system will play.

13 More fundamentally, the word "programmable"
14 would mean that the user can sit down and change the nature
15 of what is happening to the device by programming it.
16 That would imply the ability to go in and actually change
17 code and that's not what has become known as programmable
18 video games. It is the ability to plug in a new cartridge
19 and get a different game.

20 Q What is meant by the term "stored program computer"?

21 A Stored program computer refers to the digital
22 computer field in which the functions that the computer is to
23 carry out are contained in a program which is stored in some
24 type of memory. There are several different forms of memory
25 that can be used, but by changing the code that's stored in

1 the memory you change the set of instructions to that computer
2 and it carries out a different function so that you can have
3 a single piece of equipment do a variety of functions.

4 Q Would you please define the term "code" and
5 "instructions"?

6 A "Code" is a word that typically gets used for
7 defining the digital words that are supplied to a computer,
8 digital words being words made up of ones and zeros, something
9 that stupid machines like computers can understand and can
10 interpreted then by the computer.

11 A code then would be a combination, a specific
12 combination of ones and zeros and depending upon how many
13 of those you have depends on how big a variety of codes that
14 you can provide.

15 A simple minded situation, for instance, if
16 you know allowed yourself two bits, two places that you can
17 put a one or a zero, you can get four different combinations
18 of ones and zeros, so you could have four different codes
19 established by a two bit word.

20 Q How is the term "data" defined?

21 A Data typically applies to numbers, values that
22 are used by a computer as opposed to the code which defines
23 the function of the computer.

24 You would have a set of instructions, which
25 are the program, that says "Take what's in this place, add

1 it to what's in that place, multiply by what's in that place,
2 and go on." That's a programmed set of instructions, but
3 the data that would be put into those different registers
4 that that program is operating on would typically be the
5 data.

6 Q Would you please define the term "data word."

7 A In the computer field we tend to speak of one of
8 these sets of codes that I talked about a while ago as a
9 word, and what that means is it is a group of ones and zeros
10 that are combined together in a single combination, much
11 like in our English we would put a combination of alphabetic
12 characters together to make up a word, a combination of
13 ones and zeros together makes up a word and if it's a data
14 word, then it is a word that contains values, a number
15 typically. If it's an instruction word, then those ones and
16 zeros are interpreted as a code which means a specific function
17 that the computer should carry out when it sees that code.

Q What is the meaning of the term "ROM" and "RAM"?

A Both of these devices are memory devices that are more commonly used in digital computers. "ROM" stands for Read-Only Memory and as the word would suggest, it is a fixed set of codes that is in that memory, cannot be changed by the device that is reading it. It can only be read. And that would typically be used for an instruction list.

The programs that we use in video games normally are read-only memory devices that cannot be altered, cannot store any current information. They only can store fixed information.

"RAM" is a term which comes from Random Access Memory, which is not very descriptive of what it does. Basically its memory which can be writeable as be read, so that if a computer needs to temporarily remember a value or remember an instruction or whatever, it can write that information into the RAM memory and any time it wants to, come back and read it back out of that memory.

Q You used the term "register." How do you define "register"?

MR. ANDERSON: Your Honor, I don't think I want to -- I would object to this testimony. This witness was identified, I think, as a fact witness. I understand we have an expert witness coming on later. I

1 don't object to having this testimony, just so we
2 don't have any repetition of it when the expert
3 witness is called later. I don't know what the import
4 of this is from this fact witness.

5 THE COURT: What about that, Mr. Cook?

6 MR. COOK: Your Honor, the witness is going to
7 be using these terms in examination and his testimony
8 It seems to me logical --

9 THE COURT: Are you going over the same ground
10 with the witness designated as the expert witness?

11 MR. COOK: We do not propose to have the expert
12 witness give definitions of these same terms. There
13 might be a slight overlap as the occasion requires,
14 but it is not our intention to have the --

15 THE COURT: With that in mind, I'll overrrule
16 the objection. Proceed.

17 BY MR. COOK:

18 Q The pending question deals with the term "register."
19 Would you please define that term.

20 A Register is a device that is capable of storing
21 information that is written into it, but has the additional
22 characteristic typically that the various bits in that
23 register can be accessed normally by hardware to go do
24 additional functions. This is a device that normally is
25 inside a digital computer or fixed logic digital circuitry.

It is a RAM element, if you will, but with the characteristic that you can have logic functions attached directly to it and have things happen in direct response to the fact that the data is in that register.

Q In the context of these components, would you define the term "address."

A When we talk about a memory that has a lot of information in it, it is necessary to be able to go either write in the particular place that you want to write or be able to go get the information, the specific piece of information that you want out of that device. We speak of the way of identifying where in that memory we are either wanting to write or to read as being the address for that particular word or piece of information, typically a word.

Q Are there addresses, therefore, in the ROMs and the RAMs to which you testified?

A Yes, ROMs and RAMs typically would be a big array of storage, memory storage elements and the address would give us a way of identifying which part of that we want to get to.

Q Please define the term "descriptor."

A We will be using that term as a term to define a word which contains information as to what we want to have take place on the screen. In our case it will be a

1 descriptor for a moving object that says, "I want a
2 specific pattern which is stored somewhere else and a
3 specific color and specific parameters for that." So we
4 will have a list of descriptors which define the objects
5 that we want to present on the screen.

6 Q Thank you, Dr. Chandler. I now would like to
7 invite your attention to your initial contacts with
8 Mattel and I will ask whether in your initial interview
9 with Mattel you were asked anything about video games.

10 A Yes, I was.

11 Q What were you asked?

12 A I was asked whether I thought Mattel ought to
13 get involved in the video game business or not.
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1 Q What was your response?

2 A I said that I thought Mattel might be one of the
3 few companies in the country that ought to look at the field,
4 but I wasn't sure anybody should get into it at that stage.

5 Q Why did you feel that way and why did you make
6 that comment?

7 A Well, at the point the pong and tank class of
8 dedicated games had made their splash. They were there and
9 being accepted very well. Atari had themselves very well
10 established in the video game field and the somewhat
11 limited interest capability of that class of games I didn't
12 see as having a very significant life to it and therefore
13 didn't see much basis for a new company to try to get into
14 that market.

15 Q Did anything happen to change your thinking?

16 A Yes, it did. When I found out what Mattel was
17 thinking about in terms of what they thought a home video
18 game ought to be, I could immediately identify with both
19 the value of this whole new class of video game that we
20 are talking about and the ability to create a system that
21 would be capable of playing that kind of video game.
22 None of the video games that were on the market at that
23 stage of the game were capable of doing the kind of video
24 games we are talking about.
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1 Q You referred to a whole new class of video games.
2 What did you mean by that?

3 A Primarily, games provide a lasting entertainment
4 as opposed to a short lived experience, and ones that have
5 interesting appealing graphics and game play capabilities.

6 Q Can you give an example of that latter point?

7 A Well, for instance, our baseball game is one in
8 which not only does the pitcher have 16 different pitches
9 that he can throw, but after the ball has been hit, he has
10 to select the fielder that is going, that he wants to go
11 field the ball; run him over to get the ball, to decide
12 what to do with it after he gets it. Do you throw it at
13 first to try to get the guy out? Or maybe throw it at home
14 to try to keep the guy from coming in?

15 And make all the decisions just like a real
16 baseball game.

17 The batter, in addition to having to swing
18 to hit the ball either with a bunt or a swing away, after
19 he hits the ball he has to run his player and decide
20 whether to go on to second or stay at first, get caught
21 in a rundown between bases. He could take a lead off base.

22 Actually out there playing a full blown
23 baseball game.

24 And by contrast with what existed on the
25 market prior to Intellivision, that was a dramatically

1 different class of game.

2 Q What type of players were used in the baseball
3 game?

4 A In our baseball game?

5 Q Yes.

6 A We were able to use some complex animated players,
7 what we call our running man, with a number of animation
8 sequences that gave the appearance of an actual man out there
9 running as opposed to pretty much stick figures that had been
10 used prior to that.

11 Q Was an actual baseball diamond portrayed in the
12 baseball game?

13 A Yes, full-blown field with score keeping and
14 indication as to what the status of the game was and the
15 works.

16 Q Were there nine innings played in the game?

17 A Full nine-inning game, just like real baseball.

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1 Q Now, you earlier testified that you could identify
2 with the ability to produce such video games. What did you
3 mean by that?

4 A Well, by that stage of the game, the semiconductor
5 industry had moved along far enough that it was possible to
6 talk about using digital computers in the video game, again
7 at a price that could be afforded in the consumer market.
8 And the ability to apply that technology and create a system
9 that could have the kind of delegates that we were looking for
10 was possible at that point; would not have been possible a
11 few years earlier than that.

12 Q Was the programmable video game system capable of
13 coming into being at this time?

14 A Yes, it was.

15 Q Would you just briefly describe what was the
16 key to Mattel being able to make more elegant video games?

17 A Well, I think again primarily the use of the
18 microprocessor technology to be able to put together
19 digital computer circuitry, and the ability to use stored
20 patterns for the objects that we wanted to display so we
21 could have interesting objects and objects that could have
22 the animation characteristics.

23 All of that capability hinged on the fact that
24 the semiconductor industry had moved along far enough that
25 all that could be done economically; it all could have been

1 done 20 years before that, but by no means economically.

2 Q When you began to work on Mattel's Intellivision
3 products, did you have an objectives?

4 A There were several, actually, The first piece of
5 that was to get a video game that would be both graphically
6 interesting, with rich graphics and with rich game play
7 capabilities, so as to have lasting entertainment applicability.

8 But we also saw that we had all the elements
9 there for letting that be the base for a whole home
10 entertainment, home computer system capability.

11 So, the idea of making it as a base unit
12 that was modular and could be added to was a very early
13 objective of the program.

14 Q What did you actually do in connection with trying
15 to acquire the necessary microprocessors and/or computer
16 components during the early phase of your association with
17 the Mattel Intellivision project?

18 A There had been some discussions before I got to
19 Mattel with National Semiconductor relative to a set of
20 integrated circuits that were developed, typically called it
21 a chip set.

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1 Q What did you mean by that?

2 A It is a group of integrated circuits. Chip is a
3 term that has become pretty much used for describing an
4 integrated circuit. And the reason for that is that down
5 inside that integrated circuit, there is a very small little
6 square piece of silicone that is called a chip and looks
7 very much like a little chip. And it is kind of an abortion
8 of the word, but it is simple and it is what's gotten used
9 in the industry.

10 So, by "chip set," I mean a set of those inte-
11 grated circuits designed to work together to accomplish
12 the video game function.

13 One of those chips in National's case was the
14 8080 microprocessor, which is a fairly popular one at that
15 point.

16 To get back to your question, as I said, there
17 were some early discussions with National, and I got in-
18 volved in discussions with National following up on that.
19 They had a very interesting chip set that was a bit elaborate
20 and a little bit expensive at that point, but very interest-
21 ing and capable of doing the kind of thing we were interested
22 in.

23 When I say they had it, they had it in develop-
24 ment. They had breadboard versions of chips at that point.

25 About three weeks after I went to work for Mattel,

Several of us went back, came back here to Chicago to the Consumer Electronics Show first part of June. And while we were at that show, we saw two different chip sets, additional chip sets that were being shown and one of them in a hotel suite and the other one in a very secluded one of the booths. But these were developed by General Instrument and by MOS Technology; again, some chip sets that were of interest; the primary interest of what General Instrument was provided was that they were quoting a very low cost for that chip set and obviously we pursued those areas as well.

Q Did you on behalf of Mattel reach any decision as to which chip set you were going to acquire?

A Yes. I did most of the follow-up on those. And we very rapidly decided not to proceed with the MOS Technology set and so we really were primarily comparing the GI, General Instrument, chip set and the National chip set. And initially what GI had described was not capable of doing what we wanted to do, did not have the flexibility to provide the kind of game play that we were interested in.

But with conversations with them, they began to redefine their chip set to accomplish what we wanted. And National began to redefine their chip set to get their price down to where we thought it should be.

Chandler - direct

1 And we were at a point where we would have been
2 happy to go with either of those two.

3 Q Did Mattel make a choice?

4 A We actually made a choice to go with National.
5 National decided they weren't going to continue the chip
6 set about the same time so we wound up with General
7 Instrument.

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Chandler - direct

Q Just for the record, when you use the term "chip set," does that include a microprocessor?

A Yes, it does.

Q We have heard so far in this litigation much about Intellivision. Would you describe the Intellivision concept as you knew it back in the early days, or perhaps as it is presently contemplated?

MR. ANDERSON: I object, your Honor. No foundation for the question. And I think whatever Intellivision concept is is not anything that has been established at this point the witness had any part of establishing or what it was. I object to the testimony.

THE COURT: Objection will be sustained. Establish the foundation.

BY MR. COOK:

Q Dr. Chandler, during your employment at Mattel, have you ever had any contact with the name or term Intellivision?

A Intellivision, yes.

Q Would you describe what the Intellivision concept meant to you during the early stages of development of Intellivision?

MR. ANDERSON: Same objection, your Honor.

THE COURT: As to what it meant to him, just tell him what he knows -- I will sustain that objection.

Chandler - direct

Ask the doctor to tell us what he knows about the concept of, what he learned personally about the concept of Intellivision, for the record.

Go ahead.

BY MR. COOK:

Q Dr. Chandler, what did you learn about the Intellivision concept?

A The concept as it was presented to me really just first had to do with the idea of what a home video game ought to be, one with lasting game play and rich graphics, and ought to be dealing with things like a baseball game that can last for a while instead of being a very short-lived one.

From that point on, I was primarily the one defining what the Intellivision system was, what the concept for expansion was, the concept of it being a modular system that could be expanded into doing other things in the home. I was a heavy part of evolving that set of concepts.

Q Can you give us a few examples of the versatility of Intellivision?

A One of the things that was obvious that could be done with it is to add additional memory and storage medium for data and things of this sort, so as to be able to do the more general home computer application, which was one of those applications.

1 Another area that was evolving at that time
2 and obvious would get to a point where it was a practical
3 peripheral for the system was the whole voice synthesis
4 area, the ability to create voice sounds from digital infor-
5 mation.

6 And we have developed that and have such a
7 peripheral coming up on the market within the next month.
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1 Q Was it considered that education and informa-
2 tional objectives should be achieved through the use of
3 Intellivision?

4 A Yes. Entertainment looked like it was always
5 going to be the entree into the field. But the applica-
6 tions that it had the potential and therefore should be
7 applied to would be the education within the home. I
8 don't particularly say education in the school system
9 primarily, but within the home environment, supplemental
10 education; the ability to do functional things for people
11 in the home in addition to the entertainment for all areas
12 of interest; communication into the home is one of the
13 areas that would be related.

14 Q Let me invite your attention to the exhibit
15 book which has been presented to you.

16 And your Honor might be interested in following
17 this also.

18 I'd like to ask you, Dr. Chandler, if you could
19 identify the DX A-1, which physical unit to which I am
20 directing your attention.

21 A Our keyboard component which is on the table
22 over here. It has at present a master component sitting
23 in it, connected to it to make up a whole computer system.

24 Q Would you please identify DX A-2.

25 A DX A-2 is the owner's book that goes along with

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1 that keyboard component. It contains information about
2 how to use the system, as well as some of the things
3 that are, can generally be done with the whole computer
4 system.

2 5 THE COURT: Just to help me follow this, Mr.
6 Cook, in view of the fact that the accused games,
7 we know what they are now from plaintiffs' evidence,
8 why is it necessary, I'd like to have you identify
9 for the record so that it will contain the answer,
10 why is it necessary to go into this evidence about
11 this particular item?

12 MR. COOK: First of all, your Honor, it is going
13 to be the brief visit with this evidence. But I think
14 it is proper to establish in the record the extent of
15 Intellivision's product, its application and its
16 utility, specifically the notion of the computer-
17 based Intellivision products.

18 THE COURT: Are those the six games, the six
19 accused games played on this DX A-1?

20 MR. COOK: No, they are not, your Honor, but they
21 are played on the master component which is associated
22 with and is disclosed within the keyboard which is
23 identified as DX A-1. They are integrated systems,
24 and I thought it quite clear we spend a short period
25 of time to give the Court the insight into the whole

Chandler - direct

1 Intellivision concept and in that context, the key-
2 board component, the master component, the various
3 cassettes that were used with the keyboard components
4 and various cartridges that are used with the master
5 component. It is an integrated package and I think
6 it is proper to have it briefly presented to the Court.
7 We don't propose to dwell on it at any great length,
8 but I think it is appropriate background and supports
9 Mattel's position that we are using the computer
10 technology, we are in the computer age, and that
11 both the keyboard and the master component, the
12 educational and various networks use the component
13 of the computer as well as the video games.

MR. ANDERSON: May I, your Honor?

I do object to certain aspects of this. I didn't want to interfere.

But, Mr. Cook has just referred to the Intellivision concept and the Intellivision system. And I think that's -- and then refers to the keyboard. And this just really leads us away from what we are talking about. All of the proofs that we put in, all of the issues here involved only the master component and one of six game cartridges that's plugged in; nothing else. And I think to muddy that up by talking about some big system that involves a keyboard and other things I think only injects elements of confusion in the language. And I think we should stick to the language.

THE COURT: That's why I asked the question.

MR. COOK: Your Honor, it is refreshing to see --

THE COURT: Wait a minute. Mr. Anderson, because I want the record to be clear about this, do I not understand correctly that these six games, these cassettes that you referred to, are not played with this Exhibit 1-A?

MR. ANDERSON: That's absolutely my understanding. 1-A has nothing to do with the games as far as I know.

THE COURT: That's what I understand also. So why go into something that has nothing to do with the

case the plaintiff has put into the record? Mr. Cook, why?

MR. COOK: Your Honor, I have already briefly responded, I think, to the Court, and I hope that I had satisfied the Court.

We have an integrated system. Part of the system comprises the keyboard components; part of the system comprises the master component. They all go together. They fit together, as the Court can tell from an inspection of the integrated assembly.

Your Honor, we could probably be past it by now, but we are spending all this time talking about it. But it is part of the system that is involved and it is part of the computer based activity we want to develop.

THE COURT: I will leave it this way: Mr. Anderson, you reserve the right to move to strike this testimony if it is not shown to be admissible as Mr. Cook has just represented and what he is saying.

The reason why I asked the question, Mr. Cook, I think we ought to keep this case down to what, the case that the plaintiffs have put into the record. Let's keep to that.

MR. COOK: We are trying to do our best, your Honor.

THE COURT: All right. Let's go ahead now. He

reserves the right to move against this evidence afterwards, after I have heard a little more about it.

MR. ANDERSON: I would like to reserve that right, your Honor, especially in view of other exhibits that I notice are noticed up.

THE COURT: All right.

MR. COOK: Your Honor, just one brief comment. Mr. Anderson cannot have it both ways. In his case he cannot refer to everything that happened in all the previous litigations and all the irrelevant material to which he was referring, and now when it comes to our case, take a totally inconsistent position.

THE COURT: Let us proceed.

MR. COOK: May I proceed with the witness?

THE COURT: Sure.

BY MR. COOK:

Q Mr. Chandler, we were discussing previously Defendants' Exhibit A-2. Let me invite your attention to page 29.

A Yes.

Q What is set forth on page 29?

A It is a glossary of a number of terms that are used generally in computer field, and I won't dwell on them, but there are a number of these that might be of interest.

Q Would you tell us a few that you would like to have the Court refer to?

MR. ANDERSON: Your Honor, I would like to object to this. This is a manual on the keyboard component, and it is a glossary of terms, apparently, about the keyboard components. And it has nothing to do, it is this big keyboard over there, the type-writer-type thing, that just is not involved in the issues. And I think to go into the keyboard component and the terms that are used with respect to the keyboard component and how the keyboard component might be used to do other than play these games is totally irrelevant. And I do object.

MR. COOK: Your Honor, I think you had already suggested to Mr. Anderson that he could reserve the

right to object, and I think under that condition he should probably reserve the right to object. This is a very short question; it is a glossary, and to what it relates.

THE COURT: I will listen to more of this.

BY THE WITNESS:

A There are a number of terms in here that we will be using in talking about the master component, such as binary numbers, numbers that are dealing with ones and zeros; bits and bytes.

And I'd like to add to that DECO, which is term that we will use a bit, is individual location for a 1 or a 0 as an individual piece of a number.

A byte is a term that deals with words that are eight bits long, fairly typical word size for many of the digital computers in the system. Typical micro-processor that we are using happens to have 10-bit instruction words. And we have coined the term DECO to represent that 10-bit instruction word. And we will be using that term occasionally through our discussions.

A character, again, is the individual letter or we have broadened that in our use of it to include a little graphic block that's the same size as an alphanumeric character, allowing us to have characters other than just the alphanumeric characters.

Q Could you just briefly call the Court's attention to several other words that are in this glossary which are relevant to --

A What we will be doing?

Q -- the accused video game products.

A Memory, the one that is down the left-hand side of it, and we have talked about a bit, ROM and RAM are described at the right-hand side, a program is one that we touched on briefly, but will be an important part of what we will be talking about, and a program is the collection of instructions, a set of instructions that a digital computer follows in carrying out the functions that it performs.

Q What about software?

A Software is a term that has evolved in the computer industry to represent the collection of program codes that have been generated to present the computer as a set of instructions for it to carry out, and I guess the term "software" came about because it's the opposite of hardware, hardware being the physical material that is in the computer and software being that which the hardware works with.

It can take a number of forms. In our case it is provided in the cartridge as well as some ROMS that are internal to the system, as we will point out as we get into describing the system.

Q Dr. Chandler, will you be using various ones of these

words to which you have invited the Court's attention in connection with your description of Mattel's accused video games?

A I suspect we will be using most of the ones we have just identified yes, sir.

Q Would you please refer to DX-A-3 and I ask you to briefly identify that?

A DX-A-3 is a brochure that describes the Intellivision system. It has a picture of the combination of the keyboard component and the master component on the front. Internally it shows some of the games that are available and being developed.

Q There is a reference to network. Can you be more specific about what those game networks or networks mean?

A In terms of identifying classes of software, of cartridges for the Intellivision system, it became apparent that there were several different fields in which that kind of software made some sense and our marketing people have grouped those into what we are calling networks, like a broadcast network sort of thing would be.

The sports network is the first one that is listed here and includes, as you might guess, games of the sports variety, baseball, football, so forth.

On the next page you will find the children's learning network, a couple of cartridges in the fun and

educational field, math fun and word fun.

Q Those are the bottom of the page?

A Bottom of the page.

Q What's above that?

A Second page -- I guess I missed one -- strategy network, games like backgammon and checkers. On the next page you will find the action network, the armor battle, sea battle, space battle programs and there are others that have been added to that network since.

On the right-hand side of that the gaming network, the poker and blackjack cartridge and roulette and horse racing.

What is on the next couple of pages are some of the proposed software for the keyboard component, which comes in a cassette form instead of the cartridge form and provides the ability for the user to utilize these things without having to be a computer expert. They are designed as preprogrammed software that can be used by anybody without their having to be a computer expert.

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Q Please identify DX A-4.

A DX A-4 is another brochure primarily concentrating on the keyboard component and the cassettes that are associated with it. The first page of it is that. The second page is the cartridge.

MR. ANDERSON: Your Honor, I would like to object to this. This apparently has only to do with the cassettes, the tapes, and the keyboard or --

THE WITNESS: The second page has to do with cartridges.

MR. COOK: I think counsel should look at the entire exhibit, your Honor, before he --

MR. ANDERSON: I apologize, your Honor.

BY MR. COOK:

Q Will you continue, please, briefly, Mr. Chandler, with your answer.

A I think maybe I had finished. It is a brochure on the system and shows both some of the options for the cassettes as well as the cartridges.

THE COURT: All right. It is now 12:30. Let's adjourn now and reconvene at 2:00 o'clock.

MR. COOK: Thank you, your Honor.

(At 12:30 p.m. the trial in the above-entitled cause was recessed to 2:00 p.m. of the same day, Tuesday, July 6, 1982.)

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

THE MAGNAVOX COMPANY, a corporation,)
and SANDERS ASSOCIATES, INC., a)
corporation,)

Plaintiffs,)

vs)

MATTEL, INC., a corporation,)
SEARS, ROEBUCK & COMPANY,)
a corporation,)

Defendants.)

80 C 4124

Before The HONORABLE GEORGE N. LEIGHTON,
Judge

Tuesday, July 6, 1982

2:00 p.m.

The trial was resumed pursuant to adjournment.

Present:

MR. THEODORE ANDERSON
MR. JAMES T. WILLIAMS

MR. GRANGER COOK, JR.,
MR. EDWARD D. MANZO

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MR. COOK: Good afternoon, your Honor.

THE COURT: Good afternoon. Mr. Cook, you may proceed.

MR. COOK: I'd like to recall Dr. Chandler, please.

DAVID P. CHANDLER,

called as a witness by the defendants, having been previously
duly sworn, was examined and testified further as follows:

DIRECT EXAMINATION (continued)

BY MR. COOK:

Q Dr. Chandler, at the end of this morning's
session, we had completed a discussion of DX A-5. I'd
like to invite your attention now -- correction.
Completed discussion of DX A-4.

I'd like to now invite your attention to DX A-5.
Would you please identify that exhibit.

A This is another brochure about the Intellivision
system. Again, it shows some of the highlights of the
system with the keyboard component, emphasizing the fact
that it is a system for games, entertainment, self-
education and personal improvement for the family situation
at home.

Q Is this the one that is entitled at the top
the computer-based system?

A Yes; it is based on, of course, the digital
computer system that's in the master component as well as
the expansion in the keyboard component.

Q Please identify DX A-6.

A DX A-6 is another brochure, and this one is emphasizing the cassette network that we have for the keyboard component primarily.

Q Please identify DX A-7.

A This one is an ad that was generated again to advertise the Intellivision system, emphasizing both the fact that it is a home video system, and that it provides game play entertainment for the total family.

Q Please identify DX A-8.

A This is another ad, this one emphasizing there is an entertainment computer, one that adds additional entertainment capability in the home environment.

Q Let me now invite your attention to DX B-1. Would you please identify this for the Court briefly.

A This is a package for the basic language cartridge and cassette that is available for the keyboard component. It provides the ability for the user to actually do their own writing of computer programs and storing them.

Q Please identify DX B-2.

A DX B-2 is a manual that comes with it, which primarily is a primer in the basic language for people who are not familiar with computers.

Q Please identify DX-B-3.

A DX-B-3 is the basic language cartridge that plugs into the keyboard component and provides the program for letting it do the basic language.

Q Please identify DX-B-4.

A DX-B-4 is a cassette, data storage cassette to be used with the keyboard component so that basic language programs can be stored and loaded back into the system.

MR. COOK: Your Honor, we don't have extra copies of this. With your permission maybe I can have this handed up to you.

THE COURT: All right.

MR. COOK: You will note that DX-B-1 is the package and the other exhibits are inside.

BY MR. COOK:

Q Would you please identify DX --

THE COURT: Just a minute.

MR. COOK: I'm sorry.

MR. ANDERSON: May I see what it is that the Court has been handed.

Thank you.

(Brief pause.)

MR. ANDERSON: Thank you, your Honor.

THE COURT: Let me look at this.

MR. ANDERSON: Your Honor, I would object to that

particular exhibit or set of exhibits.

THE COURT: You want to bear in mind, Mr. Anderson, that these have not been offered in evidence. All that Mr. Cook is doing is showing it to the witness. I don't know -- that's all he is doing. He hasn't offered it in evidence.

Now, do you have an objection to it being shown to the witness?

MR. ANDERSON: I think he has been asked some questions about it on a very rapid-fire basis.

THE COURT: Could you state for the record, Mr. Cook, what is the purpose of these questions concerning this exhibit, DX-B-2..

MR. COOK: Well, your Honor, the questions related to DX-B, which comprise the B-1, B-2, B-3 and B-4 exhibits, all relate to the basic cartridge which is used with the keyboard and this is just identification of the various components that are, can be an integral part of that keyboard.

THE COURT: And these cartridges include the accused games?

MR. COOK: No, they do not, your Honor.

THE COURT: Now we come back to what I said earlier. Why is it necessary to go into some matters that have nothing to do or at least -- I'll correct myself -- in which the accused games are not used? Why is that necessary?

MR. COOK: Your Honor, our basic and fundamental position, I think as we indicated before, is that the video games accused to be an infringement are an integral part of the Intellivision product. Intellivision includes the keyboard, includes the master component, and all of these elements we consider to be computer-based, and they are following the computer techniques of the prior art. It is essential in my judgment, your Honor, that we be able to present to the Court all of the various parts of the system which we contend is computer-based.

THE COURT: Could you state how, in what way do the accused games become part of the system that you're describing by asking this witness these questions? Just state it for the record.

MR. COOK: The video games, your Honor, are designed to be used with the master component, which we will discuss in just a few moments with the cooperation of Mr. Anderson, and the master component is designed to be used with the keyboard.

If you will note from the physical exhibit over here, the master component identified as DX E-1 is adapted to be stored and placed within a recess provided in the keyboard. DX A-1, the keyboard, is designed to be used with various cassettes, some of

which are in your Honor's hands in that series we just identified.

Furthermore, there are cartridges designed to be used with the keyboard, one of which is in your Honor's hand.

In addition to that, the master component, DX E-1, is designed to be used with these cartridges, several of which are the accused cartridges.

Furthermore, the cartridges either can be disposed within the master component directly or they can be inserted in the side of the keyboard. The system is designed to be used in a way when the master component is stored in the position shown, the only access to it is through a slot which is on this side and which the cartridges are disposed, if you remove the master component and treat it as a separate entity, there is another opening for the cartridges.

THE COURT: Which include the accused games?

MR. COOK: Yes, sir.

THE COURT: All right.

MR. ANDERSON: If I may, your Honor, these are examples of things that are not used to play the accused games, the cassettes.

THE COURT: Would you tell me why is it that Mr. Cook has stated for the record that this equipment is used to play the accused game?

MR. ANDERSON: I don't think -- if I understood him, he hasn't said that.

THE COURT: I understood him to be answering my question in the affirmative.

MR. ANDERSON: There may be many accessories that are not used to play the games. These are accessories that can be used to do other things. They are not used to play the accused games. They are only two components.

THE COURT: Is Mr. Cook either not understanding my question or is it that I don't understand his answer?

MR. ANDERSON: I think he is not -- well, I don't know, your Honor, I don't know.

THE COURT: Well, which is it? Do you, Mr. Cook, understand what Mr. Anderson's objection is?

MR. COOK: Mr. Anderson is trying to be an obstructionist. That I understand, your Honor.

The point I tried to --

THE COURT: Let's put it this way. Will you at some point in the direct examination, either of this witness or some other witness, will you be able to take these accused game cassettes and use them on that equipment there that you have described?

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MR. COOK: Yes.

THE COURT: You will?

MR. COOK: Yes.

MR. ANDERSON: Your Honor, DX-B, the exhibit you have in front of you can in no way be used with the accused games, in no way whatsoever.

THE COURT: Now, Mr. Anderson, you heard Mr. Cook's answer to my question.

MR. ANDERSON: Well, Mr. Cook is suggesting that you can plug a game cassette, a game cartridge into the master components. We demonstrated that. That's all it takes to play the game. Now Mr. Cook is suggesting that you can also put the master component, physically set it on that keyboard and plug the cassette -- plug the game cartridge, the accused game cartridge in the side of the keyboard. And there are connections that go straight through. And just use the master component and the cassette, the cartridge, nothing else. The keyboard does not enter into the accused games.

We demonstrated the accused games. We proved up our case without the keyboard.

This particular Exhibit B would never be used, not even physically connected with the accused games in any way.

THE COURT: That's what I understood to be the fact.

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But Mr. Cook tells me that's not so.

MR. COOK: Your Honor, I said it three times to the Court. Mr. Anderson is doing his best to confuse the Court. I apologize.

THE COURT: Wait a minute now. I want you to extend my -- I am not going to do anything of Pejorative description of Mr. Anderson's objection. But I am going to let you, Mr. Anderson, you wait. When Mr. Cook finishes, if you demonstrate that you are correct, you move to strike and I will strike all of this evidence from the record.

Let's proceed now.

MR. ANDERSON: Thank you.

MR. COOK: Your Honor, I believe you were inspecting the --

THE COURT: Yes, I was inspecting DX B-2. And I was, let the record show, I am looking at it and it has DX B-1, DX B-2, DX B-3 and DX B-4. They are various component parts of this basic cassette and cartridge set of Intellivision programs, step by step introduction to basics of Mattel electronics.

Go ahead.

BY MR. COOK:

Q Dr. Chandler, I hand you DX C-1. I will ask you if you can identify it as well as any of the other components of it.

A DX C-1 is the package for conversational French cassette. Inside it are the two cassettes themselves. There should be an instruction manual which does not appear to be there for some reason.

MR. COOK: I think it might be in the Court's list of exhibits.

THE COURT: Probably is.

MR. COOK: I think it is in your left hand, your Honor.

THE COURT: What is the exhibit number?

MR. COOK: DX C-2.

THE COURT: All right, I have it right here.

BY THE WITNESS:

A Yes, okay.

This is a, we program cassettes to allow the user to learn conversational French with the Intellivision system.

BY MR. COOK:

Q Let me hand you DX D-1, D-2 and D-3.

A Again, D-3 will be in your book, I believe, your Honor, or D-2, I mean DX D-2.

THE COURT: I have it.

BY THE WITNESS:

A And again, the package for the physical cassettes and the cassette itself that is used with Intellivision system to provide a personalized exercise program.

BY MR. COOK:

Q Dr. Chandler, are you prepared to give a very brief demonstration of the way in which one of the French cassettes are used in the keyboard?

A Yes, I can.

In order to make this brief, what I have done is taken a cassette similar to the one that we have in the exhibit, and installed it into the system and got it partly in so that we could quickly see a part of what is happening.

THE COURT: All right. Now, Mr. Cook, in view of the objections which I have allowed Mr. Anderson to reserve the right to renew, before you do that, let's follow general rules of relevancy and materiality. Let us first have the witness utilize this equipment. Again for the record, that is what?

MR. COOK: DX --

THE WITNESS: The cassette that is in use is
DX --

THE COURT: No, start off with what -- have you marked that television screen as an exhibit?

MR. COOK: No, we have not, your Honor.

THE COURT: Can the record show it is a regular 19-inch television set?

MR. COOK: 23 inches, your Honor.

THE COURT: All right, 23-inch television screen. But what the witness is now actually touching is Defendants' exhibit what?

MR. COOK: D-1, DX-A-1, in which we have mounted DX-E-1, and have a cassette in the system, the same as DX-C-3.

THE COURT: Let me make a suggestion, in view of the objection which was raised in which I told Mr. Anderson to reserve the right to renew.

Would you do that, would you please take

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Plaintiffs' exhibits and, Mr. Anderson, would you remind me, what is the exhibit number of the six accused game cartridges? Or do you have them marked as Defendants' exhibits, Mr. --

MR. COOK: Yes, I do, your Honor.

THE COURT: Will you please --

MR. COOK: They are marked DX-A, A-1, AB-1, AC-1, AD-1, AE-1 and AF-1.

THE COURT: All right. Would you please have Dr. Chandler utilize Defendants' Exhibit A-1 to show how the Defendants' Exhibit A-1 can be utilized to enable a user of Intellivision to make use of the accused game?

BY MR. COOK:

Q Dr. Chandler, take the baseball cartridge, which has been marked A-3.

MR. ANDERSON: Your Honor, is that without removing the components that have already been put in?

THE COURT: Let's see what Dr. Chandler does.

MR. ANDERSON: Thank you, your Honor.

BY THE WITNESS:

A To plug it in the cartridge board and keyboard component; push the C and return which tells the computer that I want to go ahead and play the cartridge. And I now have the baseball game up here and bring up that game and go ahead and play the game.

This is a game in which, for right now, for instance I am throwing the ball around the outfield by simply pushing buttons to indicate where it should go. I can run a player anywhere I want to, put him down off the pitcher, give the ball to the pitcher and run back out to the field, again throw a pitch and the opponent can hit the pitch. I have to select a ^{player} to go out and get it, throw over to first base and have a man out.

And we will do some more, putting out some specific characteristics in this game later on, but this will show that in fact we can play one of the accused games in this combination system utilizing the cartridge that is in the keyboard component as one of the several things that can be done with this combination of system.

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THE COURT: All right, I assume that's true of the other five.

THE WITNESS: That's true of the other five as well, yes.

THE COURT: Accused games, same way.

THE WITNESS: That's right.

MR. COOK: That's right, your Honor.

MR. ANDERSON: Your Honor, the cassette that has been inserted in the machine or the other things don't enter into this at all. The exhibits that the witness has just testified about that were put in are totally immobilized and eliminated. The only two things in use are the master component and the cartridge. The things that we identified as exhibits that are used together, they make up the total combination, the only things accused. The keyboard is not accused.

A cassette for playing conversational French is not accused. Exercising program is not accused, and they are out of this circuit. They are not involved in what Dr. Chandler has just demonstrated.

I think therefore that my objection to this must persist.

THE COURT: Let me hear again from Mr. Cook, why is it necessary to go into -- for instance, we just

looked at one exhibit, which is your Exhibit C-2, conversational French cassette instructions, DX C-2.

MR. COOK: Those are the instructions, your Honor. The cassette is DX C-3 and C-4.

THE COURT: Why is it necessary we take time -- and let the record show that I'm looking at what I estimate to be, oh, I would think about 20 or 30 various exhibits, and they are, I assume, cassettes of one kind of another.

MR. COOK: Those are cartridges, your Honor.

THE COURT: Cartridges. Why is it necessary to go into that? What is the purpose?

MR. COOK: I'll do my best to see if I can make this very clear, at least to Mr. Anderson.

The Intellivision system comprises the keyboard component identified as DX A-1, the master component identified as DX E-1, and any cassette, one of which is the French cassette in question, DX C-2, I believe it is, and any game cartridges, one of which we just identified as DX AA-1.

As the Court will recall from our memorandum for use at trial, one of our defenses of non-infringement is that Mattel is following the teachings of the prior art, not the teachings of the Rusch patent. This demonstration and the presentation of the Mattel

Intellivision system to the Court is done to establish quite clearly that this is a computer-based system, even as the literature indicates to the Court.

There are many components and facets of them and in response to the Court's inquiry, we did in fact place one of the accused video game cartridges in the keyboard, DX A-1. All of these components are essential in our opinion to establish the computer characteristics of the Intellivision system, establish the computer characteristics of the keyboard system, and establish the computer characteristics of the master component.

I think it is essential that the Court be provided with all of the evidence which relates to our defense that the accused video games as well as the accused environment as well as the Intellivision system itself is in fact computer-based.

Secondly, we do have another issue in the case of unenforceability, and in connection with that, we have contended that Magnovox is attempting to collect a royalty on the master component when, in fact, it is used in many, many non-infringing ways. The example that's been presented to the Court, namely, where the master component is stored within the keyboard is another example of the way in which the master component is used in a non-infringing way, according to Magnavox.

Quite clearly, the Intellivision system and all of its components have relevancy from both of those points of view and I think that what we are proposing to do is demonstrate to the Court, take a few minutes -- in fact, we would have been long finished if there were not these objections -- that we have in fact a computer system which does in fact act like a computer and does perform the various functions we are asking of it.

I submit, your Honor, that all of this testimony and all of these exhibits relative to any aspect of Intellivision is very, very germane and very, very material and very, very relevant on the issue of computer-based games, computer-based system, and secondly it is relevant and germane to the unenforceability defense that we have raised in this case.

MR. ANDERSON: Your Honor, I would like to briefly voir dire this witness on the keyboard and what they have called the Intellivision system. I think we can shed a great deal of light --

THE COURT: You may do that.

Do you understand, Mr. Cook --

MR. COOK: I heard the request, your Honor.

I don't think it's proper, but I think if the Court wants to go forward, that's fine.

THE COURT: The witness can always be voir dired

Chandler - direct
voir dire

before the witness answers other questions because voir dire may establish that the witness is not competent to testify or should not be allowed to testify.

Let Mr. Anderson proceed to ask --

MR. COOK: If the voir dire is limited to that, that's fine.

THE COURT: That's the purpose of voir dire.

MR. ANDERSON: Your Honor, it is not to show this witness is incompetent, but rather that the evidence is incompetent.

THE COURT: That is all right, either one, either the witness or the evidence. You may proceed to try to demonstrate that.

MR. ANDERSON: Thank you, your Honor.

VOIR DIRE EXAMINATION

BY MR. ANDERSON:

Q Dr. Chandler, is it correct that the keyboard that you have just referred to, DX Exhibit A-1 is not sold by Mattel nationally throughout the country in all of its markets?

A It is currently not nationally sold. It is being sold, but not nationally.

Q Is it true it is only being sold on a test market basis in two cities in the United States?

A At the present time that's correct.

Q Are those two cities Seattle and New Orleans?

A That's right.

Q Nowhere else in the country is that offered for sale?

A At the present moment, that's correct.

Q Is it correct that as you hooked up the system right now, the master component functions exactly as the master component functioned in the plaintiff's exhibit during the plaintiff's prima facie case which you witnessed?

A There are some differences in the mode of operation. They are not major, but there are slight differences.

Q Is it correct that the game cartridge, the baseball cartridge is connected up to the master component to function as a combination in the same way that the accused game functioned during the plaintiff's direct testimony?

A Aside from some initial steps to get that mode of operation into the system, the operation is the same. They are not directly coupled, so there is some action on the part of the keyboard component, but the net effect is to provide connection between the cartridge and the master component.

Q So any variations are merely electrical and mechanical devices --

MR. COOK: Object to that.

BY MR. ANDERSON:

Q -- to hook up the two, the cartridge to the master component, is that right?

MR. COOK: I object to that question. I don't know what it means, too vague and indefinite.

THE COURT: Wait a minute, Mr. Cook. You're not the one who is answering the question. Do you understand the question, Mr. Chandler?

THE WITNESS: I believe I do.

THE COURT: If the witness understands the question--

MR. COOK: I withdraw the objection

THE COURT: Proceed.

BY THE WITNESS:

A There is the additional function of selecting what function you want the system to do, which is necessary when the combination is connected. Once that's been done, then effectively what you are suggesting is true.

BY MR. ANDERSON:

Q Now, the fact that the Conversational French cassette is hooked up to the keyboard at the same time you're demonstrating baseball doesn't enter into the play of baseball in any way whatsoever, is that correct?

A That's correct.

Q And isn't it a fact that throughout the country the purchasers of Mattel master component and the six accused cartridges use them just that way, without a keyboard being in any way involved?

A That's correct.

Q Except for two cities, maybe?

A That's correct.

Q And in that test market, did that start at about October of 1981?

A Somewhere in that vicinity.

Q And prior to that, for several years you sold the master component and the accused games and you didn't have a keyboard available to the customer, you didn't have Conversational French available to the customer even in Seattle and New Orleans, is that correct?

A That's correct.

Q So there is really no relationship to the issues of infringement here and the application of the Rusch claims to the accused six games that involve the keyboard

1 or Conversational French or your exercising program or
2 backgammon or checkers, is that correct?

3 A I'm not sure I would agree that that's correct,
4 the difference being that one of the issues is that we are
5 using computer in the system. This helps expand, I think,
6 the fact that this is a computer system and to that extent
7 I think it is pertinent to what we are trying to present.

8 Q But it is not necessary to play the games?

9 A It is not necessary to play the games.

10 MR. ANDERSON: Your Honor, I again submit that
11 this evidence is, if anything, is irrelevant and I
12 maintain my objection. Thank you.

13 MR. COOK: Your Honor, there is nothing in the
14 voir dire that suggests --

15 THE COURT: Let me see if I understand the point,
16 Mr. Cook. As I understand the questions and Dr.
17 Chandler's answers, at the time this lawsuit was
18 filed and the claim of infringement was made, this
19 exhibit, DX A-1, wasn't in existence.

MR. COOK: Well, I'm not so sure it wasn't in
existence. I don't think the witness said that.
It was not in test market.

THE COURT: It was not in test market. It may
have been in existence in some laboratory, I suppose,
since it was put in the test market in 1981. I assume

that it was in the process of being developed at the time this lawsuit was filed, am I right about that?

MR. COOK: I think that's correct, your Honor, yes.

1 THE COURT: All right. I am going to overrule
2 the objection because I can sense, Mr. Cook -- and
3 I want to tell you, I'm going to allow you to put this
4 into the record, but I'm inclined to agree with Mr.
5 Anderson.

6 I'll review the evidence to see if it is
7 relevant and material to make the necessary findings
8 of fact. I still don't understand why you want to
9 expand this trial in bringing up all these matters,
10 particularly all this talk about conversational French.
11 What has French to do with playing baseball? One of
12 the amazing things about baseball, you don't find
13 many Frenchmen playing baseball. I'm a baseball fan,
14 one who anguishes, by the way, over the performance
15 of Chicago teams, and I happen to know that French,
16 one of the amazing things about baseball, they have
17 two teams in Canada and not a single French player on
18 either team.

19 But if you want to do it, because you insist
20 on this, as a matter of a fair trial, I am going to
21 overrule the objection, but I don't think this evidence
22 is relevant. We will proceed. At some point I'm
23 going to have to tell you we are going to have to stop
24 this.

25 MR. COOK: Your Honor, if there had been no

objection we would have been long past the subject by now and, unfortunately, we got digressed in it. We just have a short demonstration and we will be past this subject, but I think, your Honor, with due respect, it is very relevant to the defenses.

DIRECT EXAMINATION (Resumed)

BY MR. COOK:

Q Could you proceed quickly to the demonstration of the French-speaking program.

A What I have done is put in the French cassette and in the process of this last conversation, started it back to get it back to a point where I can move into a quick portion to give you a feel for the kind of thing that can be done with this kind of computer system.

(Conversational French program

displayed on television screen)

If I push the one key as she suggested, it will back up and play back again what she says.

1 And this then could go on to the rest of
2 the elements of the French lesson, letting you manipulate
3 it to the extent you need to learn what is being done
4 there.

5 Q Is that enough, Dr. Chandler?

6 A I believe so.

7 Q While you are off the witness stand, Dr. Chandler,
8 would you kindly identify DX-E-1?

9 A DX-E-1 is the master component that we have been
10 talking about, which is connected again to the keyboard
11 component; can be taken out very easily by plugging in the
12 cables the cartridge connection and the power, and we have
13 the master component which is the video game portion of the
14 system.

15 THE COURT: And DX-E-1 has been put in evidence by
16 the plaintiff, isn't that right?

THE WITNESS: That's correct.

THE COURT: Yes. And, just for the record, Mr.
Anderson, would you remind the Court what is Plaintiffs'
designation of DX-E-1?

MR. ANDERSON: Yes, your Honor, it is the Exhibit 61,
Plaintiffs' Exhibit 61, your Honor, is the Mattel master
component.

THE COURT: I'm sorry, just a minute. PX?

MR. ANDERSON: 61.

THE COURT: In other words, the point that you have been trying to make and with which Mr. Anderson has not agreed is that all of this, you could have just simply left all of this out; you could have taken DX-E-1, Plaintiffs' Exhibit 61, put the accused game cartridges in there, and we could look at it and see whether or not there is infringement or not?

MR. ANDERSON: Yes, your Honor.

THE COURT: All right.

MR. COOK: The Court would have been denied the opportunity, however, of observing the other, one of the many non-infringing applications of the master.

THE COURT: For the record, Mr. Cook, I don't understand the relevancy or the materiality of any of this. Look, you have these, you have these pictorial descriptions of them. And that should be sufficient. But let's go ahead now. I understand the point.

BY MR. COOK:

Q Dr. Chandler, has the Mattel master component marked DX-E-1 been sold by itself or with a game cartridge?

A It has been sold always with one of the game cartridges. The Las Vegas blackjack and poker cartridge is sold with it.

Q And let me hand to you an Exhibit DX-H-1. Is that the poker and blackjack cartridge to which you alluded?

A Yes.

Q Is that poker and blackjack cartridge, DX-H-1, one of the accused video games in this litigation?

A No, it is not.

Q Are you familiar with the Mattel video game cartridges that are available for use with Mattel's Intellivision system comprising keyboard DX-A-1 and the master component, DX-E-1, or just the master component DX-E-1?

A Yes, I am.

Q Would you please identify DX-F-1?

A DX-F-1 is Math Fun, one of the two children's learning programs that's available. It is both fun and valid learning.

Q Please identify DX-G-1.

A DX-G-1 is the Word Fun cartridge which, likewise, is part of the children's learning set.

Q Is the poker and blackjack, DX-H-1, part of another network?

A Yes, it's part of the gaming network.

Q Let me ask you if you can identify DX-I-1?

A DX-I-1 is the horse racing cartridge, and again it is part of the gaming network.

Q Would you identify DX-J-1?

A DX-J-1 is roulette, which is again part of the gaming network.

Q Is there yet another network?

A Yes, the cartridges you have here are the strategy network, backgammon, which is a card game, DX-K-1; and checkers, which is DX-L-1.

Q Let me invite your attention to an action network which is comprised in that.

A In the action network, we have Armour Battle, which is DX M-1; Sea Battle, which is DX N-1; and Space Battle, which is DX O-1.

Q How about this one?

A I guess this is another one that goes in that same network. It is DX P-1, which is Triple Action. It's three games in one.

Q Let me hand you another network, and see if you can identify those.

A Okay. These are the space network, and they are Astro Smash, which is DX Q-1; Space Armada, which is DX R-1; Space Hawk, which is DX S-1; and Star Strike, which is DX T-1.

Q Let me hand you another network and ask if you can identify these.

A These are parts of the sports network. Auto Racing, which is DX U-1; Bowling, which is DX V-1; Boxing, which is DX W-1; PGA Golf, which is DX X-1; and Skiing, which is DX Y-1.

Q Are you familiar with the video games in the network which are accused of being infringements in this action?

A Yes, I am. And those are Major League Baseball,

1 which is DX AA-1; NFL Football, which is DX AB-1; NASL
2 Soccer, which is DX AC-1; NHL Hockey, which is DX AD-1;
3 NBA Basketball, which is DX AE-1; and Tennis, which is
4 DX AF-1.

5 Q Let me invite your attention back to the DX AA-1
6 package and ask if you can identify the contents of this
7 package.

8 A Inside the package are, first, an instruction
9 manual that explains not only how to connect the cartridge
10 into the master component, but the game rules and how it
11 is played, the cartridge itself, which plugs into the
12 master component to provide the game played; plus two over-
13 lays which are used to convert the key pad portion of
14 the hand controller into a personalized hand controller
15 for the particular game involved.

16 And as you can see, in this case, we convert
17 that hand controller into the baseball diamond so that
18 the buttons correspond to the players in the field and
19 awhile ago, when I was throwing the ball around, we did
20 that simply by pushing the player image on this overlay
21 to get the action that we wanted to have.
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Q Now, with respect to DX-AB-1, will you please identify the contents of this package?

A Okay, this is the football cartridge, and this time again we have the instruction manual that goes with it. We have the cartridge instruction manual, as DX-AB-2. We have the cartridge which is DX-AB-3. We have the set of overlays again to make it into the necessary commands for the football game, which are DX-AB-4. And then in this case in addition to that we have, there are two play books which will provide additional patterns, formations the operator can select, both from a defensive standpoint and from an offensive standpoint in setting up the game play that you want to run, two of these, one for each player, which are DX-AB-6 and DX-AB-7.

Q With reference to the soccer package, DX-AC-1, would you please identify its contents?

A Similarly, we have in it an instruction manual which is DX-AC-2; the game cartridge, which is DX-AC-3; and the two overlays which are DX-AC-4.

Q With respect to the hockey --

MR. ANDERSON: Excuse me, I think maybe the witness misspoke on DX-AB-6. Did he identify that as an instruction manual? The set of exhibits you gave us, AB-6 is --

MR. COOK: I think that's correct, the witness

misspoke. I think he said 6 and 7. It should have been 7.

THE WITNESS: Just 7.

BY MR. COOK:

Q With respect to the hockey package, DX-AD-1, would you identify its contents, please?

A Again, an instruction manual which is DX-AD-2; the game cartridge, which is DX-AD-3; and the two overlays which are DX-AD-4.

Q With respect to the basketball package, DX-AE-1, would you please identify its contents?

A Again, instruction manual which is DX-AE-2; the game cartridge which is DX-AE-3; and the two overlays which are DX-AE-4.

Q With respect to the tennis package, DX-AF-1, please identify its contents.

A The instruction manual is DX-AF-2. The cartridge again for the game play is DX-AF-3. And two overlays again which are DX-AF-4.

Q Dr. Chandler, perhaps you can return.

I'd like to now invite your attention back to the master component which has been marked DX E-1. Now, specifically I ask you if you can identify DX E-2.

A Yes. DX E-2 is an exploded version of one of the master components in which we have taken it apart so the pieces of it can be seen.

THE COURT: Disassembled?

THE WITNESS: Disassembled, that's the word for it.

BY THE WITNESS:

A (Continuing) The section that's in the right-hand half is the plastic for the housing, top and bottom housing, and the tray that fits in the middle of it.

On the left-hand half of the box, are the various portions of what's inside the box; first, the most important part of it being the logic board which contains the circuitry, including integrated circuits, the CPU and the STIC chip which we will talk about in some detail, and the various memory devices, the RAMs and the ROMs that we will talk about, as well as the color chip and the sound I/O chip that provides the sound signals and the input/output interface.

THE COURT: Let me go over there and look at it.

I want to look at that.

1 BY THE WITNESS:

2 A (Continuing) This is the logic board and that's
3 the heart of the system.

4 BY MR. COOK:

5 Q Can you identify where that is in the exhibit?

6 A In words, you mean?

7 THE COURT: The record can show that this exhibit
8 is a wooden carrying case, that's what it amounts to,
9 and has two parts separated by three hinges, and the
10 left-hand side as one faces it, what Dr. Chandler is
11 referring to is the right-hand side as he describes
12 the exhibit.

13 Go ahead.

14 BY THE WITNESS:

15 A And the logic board is in the lower left-hand
16 corner of that right-hand side.

17 Beside the logic board is one of the shields
18 that must go over the top half of this logic board. There
19 is another shield on the bottom, if you look at the edge,
20 that's necessary in order to reduce radiation to pass the
21 FCC requirements for devices that connect to television
22 sets.

23 Directly above these two pieces are the trans-
24 former on the left-hand side of the power, secondary power
25 system that's in the Intellivision master component.

1 And on the right-hand side is the power supply
2 board, the printer circuit board with the devices on it
3 to provide the rectification and voltage regulation for
4 voltages that are needed by the system.

5 Then above that are the pieces of the two hand
6 controllers. On the left-hand side we will see the bottom
7 housings of the, these hand controllers, and inside those
8 are the pieces that make up the circuitry for the switches
9 that are activated when the user pushes the various
10 portions of it.

11 The bottom part of it, bottom as you would
12 use it, the left-hand side as we are looking at it, is
13 the circuitry to give a direct sensor, and that's capable
14 of sensing 16 different directions. Depending on where
15 the disc on top of it is pushed down, you get a different
16 code out of that as to what direction is being pushed.

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Again, above that and to our right in this case is the key portion of that hand controller; 12 keys set up with a nameplate over it that identifies these keys as a 10-key numeric key pad, plus a clear key and inner key. This is the portion that the overlays I described a while ago go over to convert that to different nomenclature as is appropriate for the game, as is shown in the hand controller that's above this one. There is one for the poker, blackjack in place.

Then on either side of the hand controller, bottom and top as we are looking at it, are two action buttons, two action buttons on each side of the hand controller. These also operate switches on the same set of mylar circuitry that we have been looking at. The entire switch circuitry for the whole hand controller is one piece of mylar with all of the circuitry on it necessary for making that connection.

Then set into what would be the top of the hand controller as you use it, or our right-hand side as we are looking at it, is the cable with the connector in it which makes contact with the circuitry in the circuit matrix I was just describing, and is the coil cable that we see on the outside of the master component as we use the hand controllers.

At the other end then is the connector that

1 plugs into the mating connectors on the PC board to make the
2 electrical connections then between the hand controller and
3 the logic board that is making up the system.

4 Q Logic board being in the master component?

5 A Yes.

6 To our right of what I was just describing as
7 the bottom part of the hand controllers is the top portions
8 of the hand controllers, the housing itself, the plastic
9 housing that forms the case; a spring that -- a little coil
10 spring; and the plastic disc.

11 The coil spring is mounted underneath the
12 plastic disc over the direction control portion of the
13 hand controller that I described earlier. And the top housing
14 holds it in place. And that provides then the plastic button
15 that is used as a direction control disc for the hand
16 controller.

17 Above the hand controllers in the box we
18 have three other things. One is the cable, the antenna cable
19 that is used to connect the output from the logic board which
20 comes out of the modulator to the television set. It is
21 a coaxial cable with what is known as RCA connectors on each
22 end of it.

23 Associated with that is what we call an
24 antenna switchbox. This is a box with a pair of leads coming
25 out of it which get connected to the antenna terminals on a

1 television set. The antenna terminals in turn, the real
2 antenna in turn can be connected to two screw posts on this
3 box, and then the antenna cable that I just described
4 plugs into a socket at the other end of this switchbox.

5 When it is connected to the television in
6 that fashion, the switch button that's on it that can be
7 moved back and forth between two positions, one called game
8 and one called TV, can switch the input to the television set
9 either to be coming from the Intellevision game or to be
10 coming from the antenna circuit that's connected to the
11 screw terminals on the system.

12 This provides isolation between the signals
13 that we would generate in this system and the antenna, so
14 that we aren't broadcasting to the neighborhood the signals
15 that we are generating on our TV game, which the FCC doesn't
16 like very well if we do.

17 The other, the remaining portion of what is
18 shown in this box is --

19 Q In the upper right-hand corner?

20 A In the upper right-hand corner of the box, are the
21 pieces of a cartridge, and you will notice in here that we
22 have a plastic housing which is about 5/8ths of an inch
23 thick, which is the major housing; a little printed circuit
24 board that has one integrated circuit on it; a small capacitator
25 or on it; and edge fingers that make the contact with the

1 connector that's inside the master component.

2 It is this component that's on the left-hand
3 end of the logic board as we look at it here.
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This little PC board fits down into this bigger housing and then the small panel, plastic panel that is on the right-hand side of this set goes over the top of that and is held in place with two screws and makes up the cartridge. So the program that we are talking about, the game play definition, is contained in this one little integrated circuit that's on this PC board and all the rest of this is just a means of handling it and getting it connected to the system.

MR. COOK: Thank you, Dr. Chandler. Can you resume the witness stand, please.

(Thereupon, the witness resumed the stand)

MR. COOK: Your Honor, do you have any questions about that?

THE COURT: No.

MR. COOK: Thank you.

BY MR. COOK:

Q Let me invite your attention now, Dr. Chandler, to the exhibit book. Let me ask you to identify DX E-3.

A DX E-3 is a picture of the master component that we have been talking about.

Q Would you please identify DX E-4.

A DX E-4 is a picture of the logic board that we were just looking at in the disassembled version of the master component.

Q Would you please identify DX E-5.

A DX E-5 is a picture -- it is the operator, the owner's manual for the master component, television master component.

Q Please identify DX E-6.

A DX E-6 is a brochure that is describing the various networks of the cartridges for the master component.

Q It describes the sports, the action, the strategy, gaming and learning fun networks?

A That's correct.

Q Please identify DX E-7.

A DX E-7 is an ad, in this case a promotional ad to encourage purchase of the master component and the cartridges that go with it.

Q Let me hand to you DX E-8, and, your Honor, this is a confidential exhibit and I'm not certain that the Court has a copy of it. I believe that this may be only copy available.

I would like, with the Court's permission, to have the witness testify about it and perhaps he can hand it to you. I don't think there is one in your box, your Honor.

THE COURT: All right.

MR. ANDERSON: Your Honor, we do not have a copy of that either.

MR. COOK: I don't know whether you do or not. I believe you requested selected portions of it. I think you got every portion that you requested, but in any event, it is highly sensitive and highly confidential. We have treated it as confidential so far, your Honor, and we have limited the number of copies.

THE COURT: If you want to keep it confidential, just let the record show you showed it to Dr. Chandler. Is it necessary to go into anything further?

MR. COOK: I just want him to generally describe what is in there without disclosing any confidential subject matter.

THE COURT: All right. Go ahead.

THE WITNESS: This is the source code, a printout of the source code for the program that we call the executive program that's resident in ROMS in the master component and defines a lot of the characteristics of the system.

THE COURT: All right.

BY MR. COOK:

Q Is that considered to be a printout of a software program?

A Yes, it is.

MR. COOK: Would you let the Court see that.

MR. ANDERSON: Your Honor, may I inquire, are we just going to offer the parts we have in evidence? If that's what is intended, that's all right. Otherwise, I think we would have to have a complete copy of what is being offered.

MR. COOK: I think we can discuss that with opposing counsel at the time we offer the exhibits.

THE COURT: Enter into a stipulation about it.

BY MR. COOK:
Go ahead.

BY MR. COOK:

Q Let me hand to you DX-E-9 and, your Honor, there are no copies of this available.

THE COURT: All right.

BY MR. COOK:

Q Would you just briefly describe the contents of this.

A This is a document which has been generated for use by programmers who would be programming game cartridges for the master component. It is a document called "Your Friend the Exec" and it describes how to interface with the executive program that we just showed in DX-E-8. It explains the contents of it. It explains something about the system that it is interfacing with, all done from a programmer's viewpoint and explaining the tools that he would need in order to be able to do that kind of programming.

MR. ANDERSON: Your Honor, I have the same problem with that. We only have portions. If you're to go into greater detail with a portion we don't have, we have to have copies.

MR. COOK: We will treat that the same way we treated the previous exhibit, your Honor.

THE COURT: You want to return this to Mr. Cook.

BY MR. COOK:

Q Would you please identify DX-E-11.

A DX-E-11 is a block diagram of the STIC Chip which is the television interface chip that we will be describing in somewhat more detail a little bit later.

Q Would you please identify DX-E-10.

A DX-E-10 is a schematic of the circuitry that's

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on this logic board we were looking at just a minute ago, the logic board for the master component, and since it is a complete schematic of that, it shows all the details of all the circuitry connections that are in there as well as the various integrated circuits that are on that board.

MR. COOK: For the record, your Honor, both DX-E-10 and DX-E-11 are considered confidential; and I would wish they be treated that way.

THE COURT: All right.

BY MR. COOK:

Q Dr. Chandler, let me invite you to turn to your exhibit book and let me ask you to identify DX-E-12 and E-13 and, your Honor, we have larger versions of these which will be available at the appropriate time.

A These represent some --

Q And, excuse me, Dr. Chandler -- I might also add, your Honor, that these are also treated as confidential, DX-E-12 and E-13.

THE COURT: All right.

THE WITNESS: These represent some of the patterns, graphic patterns that are resident in the graphics ROM chip in the system and available for use in creating the graphics, available to the programmer to use in programming game cartridges.

MR. ANDERSON: What were those exhibit numbers,

please?

THE WITNESS: The indication on here is that every where there is an X, that would be a spot that would show up on the screen and where there is not an X it would be left blank for background.

MR. ANDERSON: We have never been handed copies of these. May I interrupt long enough to look at them?

MR. COOK: You may.

MR. ANDERSON: May we have copies of these?

MR. COOK: You should have had them.

Copies will be provided, your Honor. Apparently they were not, inadvertently.

THE COURT: When will you furnish copies to plaintiff's counsel?

MR. COOK: I think we can probably do it this afternoon.

THE COURT: They will be furnished this afternoon.

MR. ANDERSON: Thank you, your Honor.

THE COURT: All right.

BY MR. COOK:

Q Dr. Chandler, let me hand to you a series of exhibits which are in a bound book, Exhibits DX E-14 through E-31, and, your Honor, I believe you have a comparable copy of these exhibits in the file, should be in the larger group of exhibits in a separate carrying case and, Dr. Chandler, let me ask you if you will briefly identify each of these exhibits and perhaps you might take them in order.

A Collectively, these are a group of specification documents generated by General Instrument relative to the integrated circuits that we have in the system.

The first one, DX E-14, is a customer procurement specification for their chip numbered AY3-8900-1, the STIC chip.

This is the part of the display processor, as we will describe later on.

The next one, DX E-15, is the device objective specification for that same device, and let me explain the difference between those two. The customer procurement spec is the spec they provide to their potential customers as a definition of what the chip is from the outside and how it would be used. The design objective spec is primarily an internal document that General Instruments generates within their engineering operation to specify what they will have, what the content of the chip will be, and how it will be developed.

DX E-16 is again dealing with the same chip, the STIC chip. In this case it is a set of system notes which describes some of the operation of the system and how it can be used.

DX E-17 are again some additional notes, not as formal as DX E-16, but again, notes dealing with the operation of the STIC chip.

The document, DX E-18, is a similar customer procurement spec to the first one we described. This time it is for AY3-8900 without the -1 and the difference is that the 8900 is configured for the European television systems, which are different in their make-up as how things are presented on television sets from what they are in the United States. The -1 is the U.S. version of that.

DX E-19 is a different vintage of the customer

procurement specification for the U.S. version of the STIC chip again.

DX E-20 is the customer procurement spec for the AY3-8914, which is called here a programmable sound generator. We call it the sound/I/O, input/output chip because it does both functions. It provides sound generation signals and provides the interface to the hand controllers for the input/output.

DX E-2 -- that must be E-21, is customer procurement spec for AY3-8915, which is the color processor, a color chip that takes the output from the STIC chip and converts it into the composite video signal to go to the modulator for the TV.

DX E-22 is the customer procurement spec for R03-9502, which is one of the read-only memories in the system. It is one that is used in this case as one of the two ROMs for the exec program, executive program that we showed you awhile ago.

DX E-23 is the customer procurement spec for R03-9503, which is another ROM, another read-only memory. In this case it is the ROM which is used as a graphics ROM, contains some fixed object patterns. The object patterns we looked at earlier are part of what's in that ROM and are available for use in graphics presentation.

DX-E-24 is a customer procurement spec for RO 3-9504, and after it there are several dash indications and the reason for that is that this is the ROM that's typically used in the cartridge and since many of the cartridges actually have two of these ROMs in it, the dash designations are to indicate the 100 series for one of the two ROMs and 200 for the other two and then the X's represent the specific patterns that are put into those ROMs for the specific games. Each game would have a specific set of dash numbers assigned to it.

The next exhibit, DX-E-25, is customer procurement spec for RO 3-9504-021. This is the same device as the one we just had for the cartridge ROM except this is the one with a specific pattern for the other half of the executive program that's contained within the master component.

DX-E-26 is the customer procurement spec for RO 3-9600. This is called here the STIC chip RAM. We variously call it a control RAM or a back tab RAM. This is one of the major chips in the system and we will describe it in somewhat more detail a little later.

DX-E-27 is the customer procurement spec for CP 1610. This is the microprocessor that's used in the master component and is the basis for the game play processor that's there.

DX-E-28 is the customer procurement spec for AY-3-8900, which -- this is the STIC chip again and is another version of the European configuration, another vintage of that spec.

DX-E-29 is the device objective spec again for the European version of the STIC AY-3-8900.

DX-E-30 is another kind of document. This is a document which is a technical description of the Intellivision system itself. It describes in general terms the characteristics of the total system. The fact it is modular goes into some of the specifications for the master component as well as some specifications for the keyboard component that we have been talking about.

DX-E-31 is a manual for the CP 1600/CP 1610 micro processor. Those are both the same processor except the 1600 is packaged in a ceramic package and we use the one that's packaged in a plastic package, which is the 1610. I believe that completes --

Q Do you have an actual specimen of the microprocessor in your pocket?

A I believe I do, yes.

Q Does it bear an exhibit number?

A It has Exhibit E-32 on it and it is --

Q Would you hand it to the Court, please.

A It is the little microprocessor, the same type

we saw on the logic board.

Q Embodied in the master component?

A Right.

Q Let me hand to you --

MR. ANDERSON: I might say to you, your Honor, that's the same as Plaintiffs' Exhibit 167.

THE COURT: Yes.

MR. COOK: Thank you.

BY MR. COOK:

Q Let me hand to you a physical exhibit that's been marked DX-AH-13 and ask if you will identify that.

A This, I believe you will find, is a STIC chip -- yes, it is, the STIC chip, the 8900 that we described before.

THE COURT: Yes.

BY MR. COOK:

Q That's embodied in the logic board of the master component?

A Logic board of the master component. Those two chips are really the heart of the two processors we have in there. The CP 1610 is the heart of the game play processor and the STIC is the heart of the display processor.

MR. ANDERSON: What was that last exhibit number?

THE COURT: DX-AH-13.

MR. ANDERSON: Is that on your list? I only go up to AH-11.

MR. COOK: It is not on the list I'm advised, your Honor. In the interest of completeness we thought since we obtained a copy of this originally that we would add it to the exhibits.

BY MR. COOK:

Q Dr. Chandler, I would now like to invite your attention to the accused video game cartridges appearing in DX AA, AB, AC, AD, AE and AF.

I would like to ask you to specifically identify DX AA-5 and I believe, your Honor, you may have a copy of this in that transfer case.

THE COURT: Go ahead. AA-5, I have it.

BY THE WITNESS:

A DX AA-5 --

MR. COOK: Your Honor, for the record, this again is highly confidential and has been so marked.

THE COURT: All right. How do you propose to achieve this confidentiality? How do you intend to do that?

MR. COOK: Well, I think we will discuss it with Mr. Anderson and see if we can't come up with a workable system. I'm just trying to highlight for the record there are certain documents we consider to be highly sensitive and have been treated confidential and have been marked confidential.

THE COURT: I'll expect you to enter into a stipulation about these things.

MR. COOK: We will, your Honor.

THE COURT: Proceed.

THE WITNESS: DX AA-5 is a print-out of the source code for the program that is the baseball cartridge program.

BY MR. COOK:

Q Is that the print-out of the software program for Baseball?

A For Baseball, right.

MR. ANDERSON: Your Honor, that is also Plaintiffs' Exhibit 135.

THE COURT: All right.

BY MR. COOK:

Q Do you have in your exhibit book DX AA-6?
I think your Honor might have this also.

A Yes, I do.

Q Would you please identify it.

Your Honor, I think you might have it in your exhibit book also.

THE COURT: Yes.

BY THE WITNESS:

A This is a print-out of the object code for that same Baseball program. The difference between the two print-outs, the object code is the actual number that go into the ROM, are highly unintelligible by people, but it is the language that the computer understands, and so that's the version for the computer.

The source code that we looked at is the one that people can understand and the one we use from a programmer's standpoint.

MR. COOK: Your Honor, that document likewise is confidential and should be treated as such.

BY MR. COOK:

Q Dr. Chandler, let me hand you DX AB-5 relating to the accused Football game and ask if you will identify that.

Your Honor should have that also.

A This is a print-out, again, of the source code for the -- must be Hockey.

THE COURT: It is Football.

THE WITNESS: Football, it is for Football.

MR. ANDERSON: Your Honor, that's Plaintiffs' Exhibit 131.

THE WITNESS: This is a print-out for the source code for the Hockey program, software program that's in the Football:--

MR. COOK: Your Honor, that likewise has been marked confidential.

MR. ANDERSON: Is it Hockey or Football?

THE WITNESS: It is Football. I said Hockey.

It's Football.

BY MR. COOK:

Q Let me invite your attention now to DX AB-6. A copy should be in each of the exhibit books, your Honor. I note that this is also confidential and, Dr. Chandler, I'll ask if you can identify this exhibit.

A Yes, this again is the object code for the Football cartridge, again, the code that goes into the cartridge ROM.

Q Let me ask you to identify DX AC-5, which relates to Soccer and also note that that is a confidential document, your Honor.

THE COURT: All right.

MR. ANDERSON: Your Honor, I don't know that this individual identification is necessary. I don't want to object, but I think they are all numbered. They are listed in the exhibit list.

MR. COOK: I think we will be finished within just a moment, your Honor. To perhaps avoid any confusion -- counsel and the witness were concerned about whether one related to Football or Hockey. Maybe it's appropriate.

THE WITNESS: Yes. This DX AC-5 is the source code for the Soccer cartridge.

BY MR. COOK:

Q Would you please identify DX AC-6 in your exhibit

book.

MR. ANDERSON: Your Honor, AC-5 is also Plaintiffs' Exhibit 134.

THE COURT: All right.

MR. COOK: I make the notation that both of these latter two exhibits are confidential.

BY THE WITNESS:

A DX AC-6 is the object code for Soccer programs.

BY MR. COOK:

Q Would you please identify DX AD-5. And, your Honor, that might be in the box of exhibits. I note this is also confidential.

MR. ANDERSON: That's Plaintiffs' Exhibit 132, your Honor.

BY THE WITNESS:

A DX AC-5 is the source code for the Hockey cartridge.

MR. COOK: AD-5.

THE WITNESS: AD-5. This is AC-5. You should have handed me AD-5.

MR. COOK: For the record, your Honor, it's been marked both exhibits. It should be DX AD-5.

THE COURT: AC-5?

THE WITNESS: AD-5.

MR. ANDERSON: AD-5 is Plaintiffs' Exhibit 132

relating to Hockey.

THE WITNESS: Yes.

THE COURT: All right.

BY MR. COOK:

Q Would you please identify AD-6, which is in the exhibit book and likewise confidential.

A DX AD-6 is the object code for the Hockey program.

Q Will you please identify DX-AE-5?

MR. COOK: Your Honor, a copy of this would be in your large box. Note that that's confidential.

BY THE WITNESS:

A DX-AE-5 is the source code for the basketball cartridge.

MR. ANDERSON: Your Honor, that's Plaintiffs' Exhibit 133.

BY MR. COOK:

Q Please identify DX-AE-6, which is in your exhibit book.

A That's the object code for the basketball program.

MR. COOK: Your Honor, both of those, too, are confidential documents.

BY MR. COOK:

Q Dr. Chandler, would you please identify DX-AF-5?

MR. COOK: A copy of that, your Honor, should be in the box, and this is also confidential.

MR. ANDERSON: It is also Plaintiffs' Exhibit 126, your Honor.

BY THE WITNESS:

A DX-AF-5 is the source code for the tennis program.

BY MR. COOK:

Q Would you please identify AF-6?

A I don't seem to have any F-6.

MR. COOK: There's apparently only one copy of that and it is in your Honor's exhibit book.

THE COURT: AF-6?

MR. COOK: It is in the exhibit book I believe on the desk, your Honor, up on top.

THE COURT: All right, I have it.

MR. COOK: Perhaps you might hand that to Dr. Chandler so he could confirm what it is, your Honor, if I may. It just arrived, apparently, and that is the only copy we have.

MR. ANDERSON: Again, we haven't seen it, or at least I haven't, and I know that we don't have a copy.

THE COURT: Why don't you furnish these exhibits, a copy, Mr. Cook?

MR. COOK: Your Honor, we tried to do that.

THE COURT: To opposing counsel.

MR. COOK: I agree they should have had a copy and they did not. It will be done immediately.

THE COURT: All right, that will be done.

MR. COOK: Can you answer the question, sir?

BY THE WITNESS:

A That was the object code for the tennis cartridge.

BY MR. COOK:

Q Let me hand you five video tapes which have been marked DX AG-1, 2, 3, 4 and 5, and ask if you can identify those tapes.

MR. COOK: And, your Honor, these tapes were supplied to counsel for Magnavox and I believe that they used them as a basis for generating their six video tape sections that they demonstrated to the Court in their prima facie case.

BY THE WITNESS:

A DX AG-1 is a video tape of some sections of game play on Football, Baseball, Basketball, Armour Battle and Backgammon.

DX AG-2 is a similar video tape of sections of Tennis, Bowling, Sea Battle, Horse Racing and Snafu.

DX AG-3 is video tape of portions of Snafu continued from the other one; Triple Action; Space Armada; Astro Smash.

DX AG-4, video tape of portions of play of Auto Racing, Golf, Soccer, Hockey and Roulette.

And DX AG-5 is a video cassette of portions of game play of Poker and Blackjack, Checkers, Space Battle, Skiing and Boxing.

MR. ANDERSON: Your Honor, I might state that our plaintiffs' Exhibit 168 is made up of the six

Pages

755 to 903

In Camera

Confidential